



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

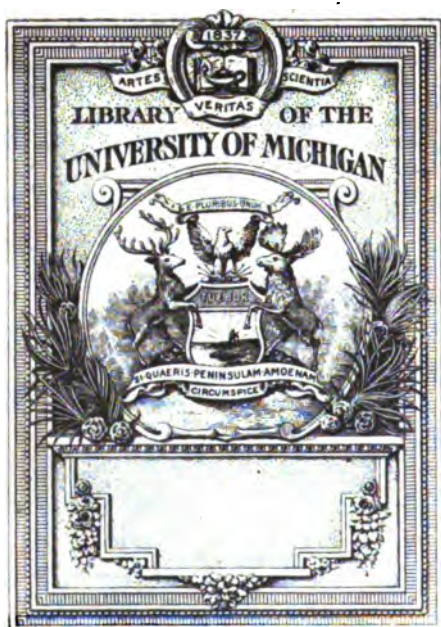
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

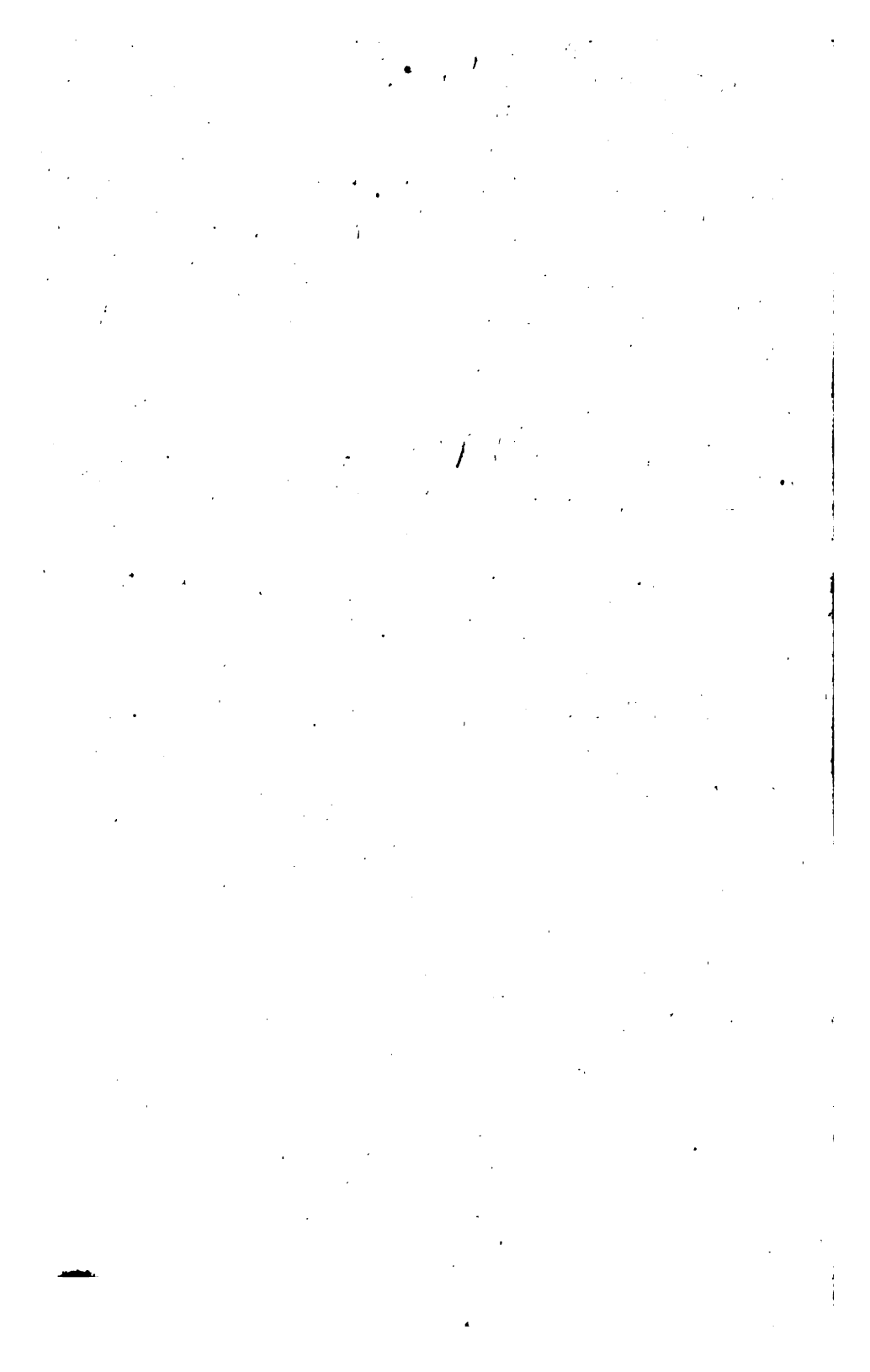
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

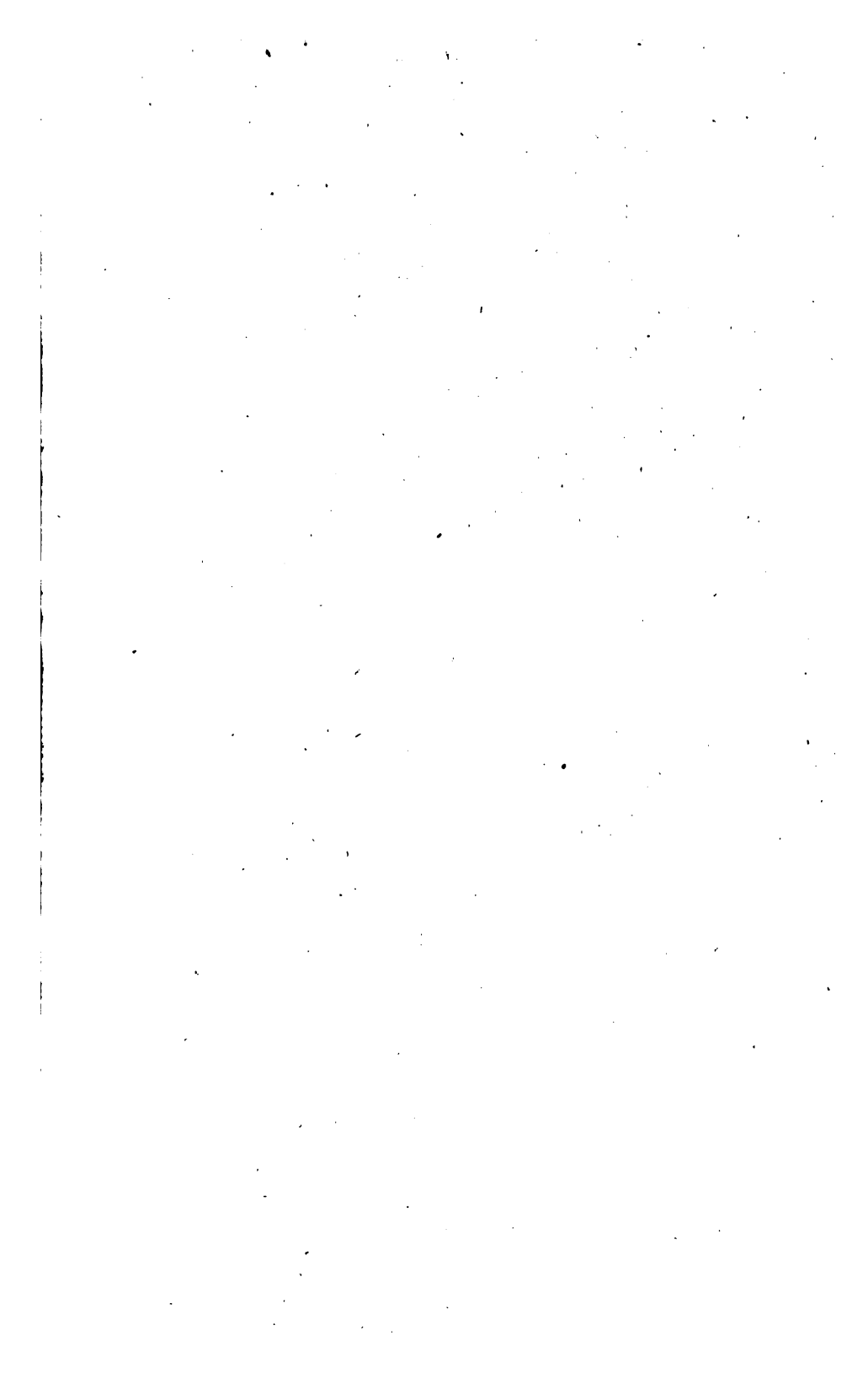
About Google Book Search

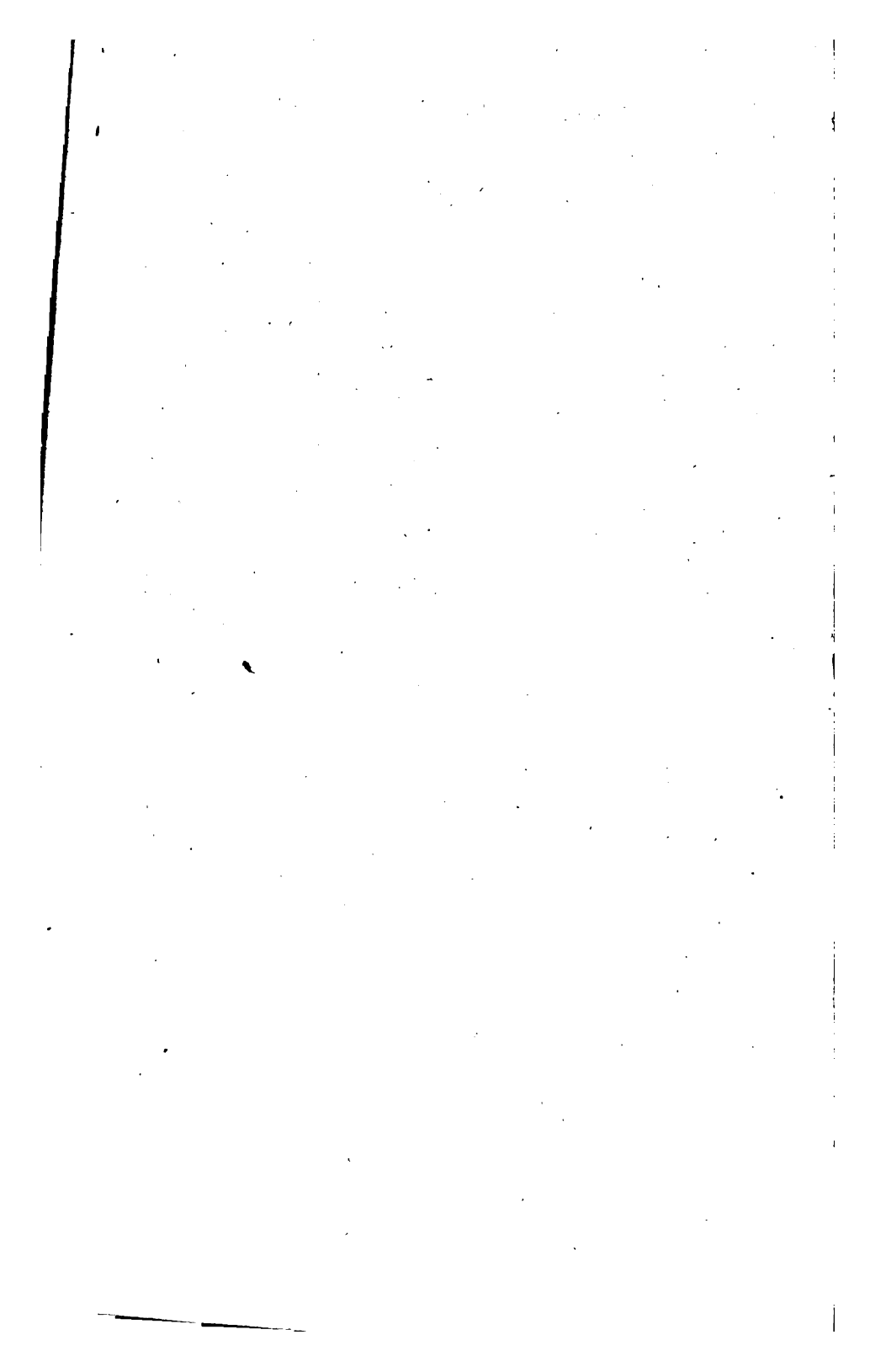
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



BE
51
B4







175
3

ELEMENTS
OF THE
PHILOSOPHY OF THE MIND,
AND OF
MORAL PHILOSOPHY.
TO WHICH IS PREFIXED
A COMPENDIUM OF LOGIC.

BY THOMAS BELSHAM.

ΑΛΗΘΕΙΑΝ ΖΗΤΩ, ΤΟ΄ ΗΣ ΟΥΔΕΙΣ ΠΟΠΟΤΕ ΕΒΛΑΒΗ.

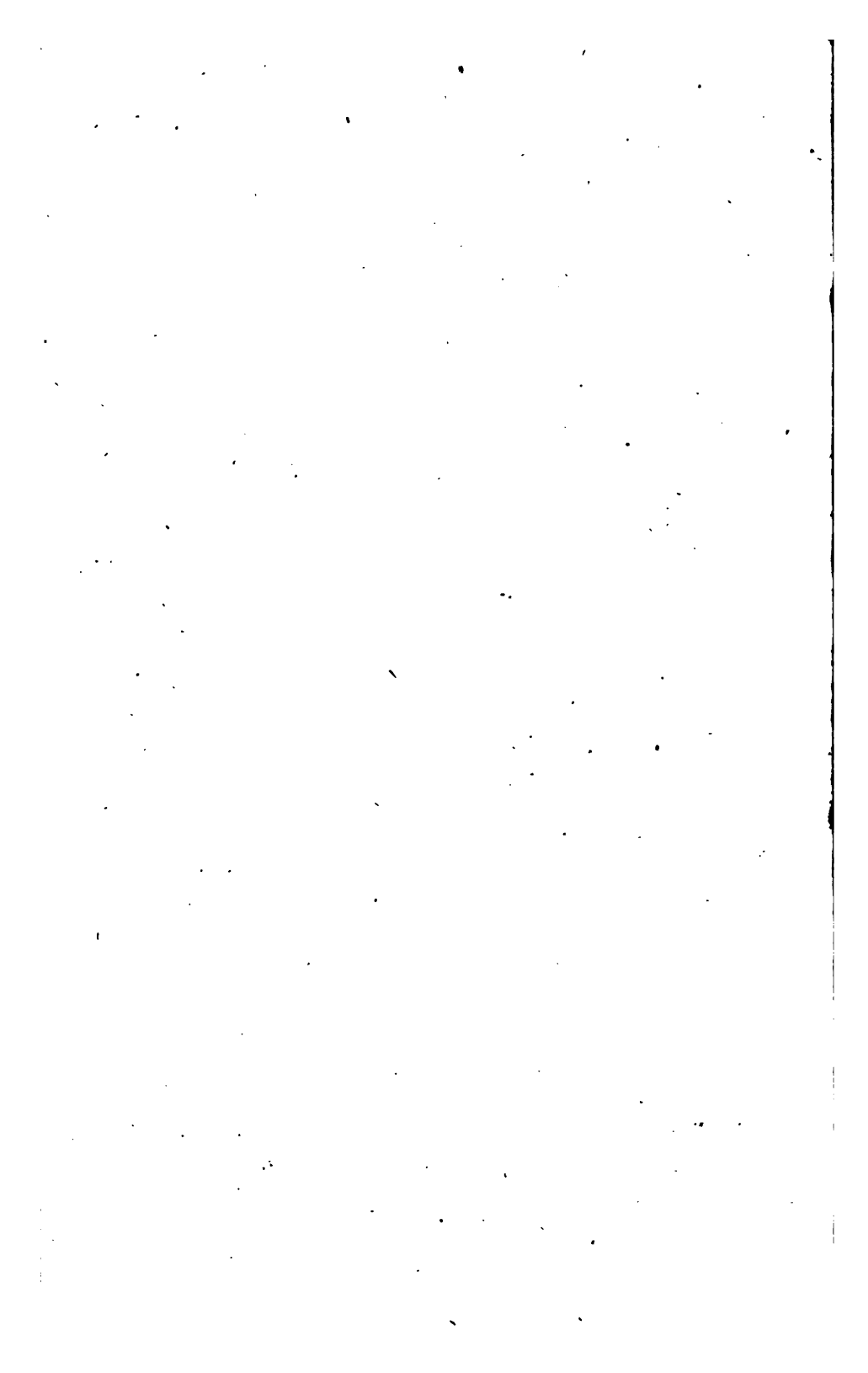
Marcus Antoninus.

L O N D O N :

PRINTED FOR J. JOHNSON, ST. PAUL'S CHURCHYARD,
BY TAYLOR AND WILKS, CHANCERY-LANE.

1801.

Union



P R E F A C E.

THE following sheets contain the substance of a course of lectures, which the author delivered to his pupils, upon some of the most interesting subjects which can occupy the attention of the human mind.

The author's sole end was the investigation and diffusion of useful truth, and his desire was, not to influence his pupils to adopt his own opinions, but to excite in them a spirit of inquiry, and to assist and encourage them to think, and to judge for themselves.

With this view, in all disputable questions he has endeavoured to state the evidence on both sides with fairness and impartiality ; and has in no case intentionally omitted, or misstated any arguments which have been produced in favour of hypotheses, which appear to him to be erroneous.

neous. Nevertheless, while he was solicitous to do justice to the opinions of others, he did not regard himself as under any obligation to conceal his own.

He laments that discussion, which is of so much real use for the discovery of truth, should ever degenerate into personal altercation and abuse : and he has been anxious to avoid all unbecoming reflections upon the understandings, and the motives, of those whose opinions he controverts. Men of equal talents and integrity will, from the different bias of their education, and from the influence of other circumstances, often think differently upon the same subjects, and will even form different conclusions from the same premises. This circumstance does not indeed diminish the value of truth, but it ought to promote candour, and to stimulate inquiry. The sincere lover of truth will be as much gratified by the correction of an error, or by an accession to his own intellectual stores, as by silencing an opponent. To him, truth is victory. And when truth is the object, evidence alone must be sought for, and examined with calmness and rigour. Self-interest,

interest, prejudice, and passion, must keep aloof.

The doctrine of Association, opened by Locke, improved by Gay, matured by Hartley, and illustrated by the luminous disquisitions of Dr. Priestley, the author regards as established beyond the possibility of controversy, in the judgment of those philosophers who have studied, and who understand it. He does not presume to think that he has added any thing material to what these great metaphysicians have advanced ; and shall deem it sufficient praise, if he has succeeded in placing the elements of their profound investigations in a light so clear, and distinct, as to facilitate the progress of those who are desirous of acquiring information upon the interesting science of the human mind.

As the author's ambition was not so much to attain the reputation of an original writer, as to communicate to his pupils the most valuable instruction in the most eligible form, he has made no scruple of collecting information from every quarter, and has used without hesitation the method, and sometimes even the words, of

other authors, when they have suited his purpose. To Dr. Hartley he is principally indebted; it having been the author's main design, in the first part of the work, to illustrate Hartley's Theory of Association. Of other authors he has also made a liberal use, but not without acknowledging his obligation, as the references in the margin will sufficiently testify. The plan he has adopted, has also made it necessary for him occasionally to use some repetitions, which he trusts that the candid reader will excuse.

The author has taken no notice of the theory of Kant, so much celebrated amongst the metaphysicians upon the continent; because, though he has perused the publications of Dr. Willich, and Mr. Nitsch, he has not been able to attain a distinct conception of that philosopher's peculiar principles; nor of the extraordinary discoveries which he is said to have made, in the philosophy of mind.

The author flatters himself, that he has stated the evidence for the doctrines of Necessity, and Materialism, in a form so obvious and succinct, and that he has suggested

such answers to the popular objections, as, if they fail to convince, will at least abate the clamour of ignorance and prejudice, against these principles, as if they were unfavourable to virtue, and subversive of religion.

The Theory of Morals, defended in this work, is that which necessarily follows from the Hartleyan Theory of the Mind, and from the doctrine of the Association of Ideas. And the author has endeavoured, briefly, to point out the errors into which eminent writers who have adopted a different theory have fallen, in their attempts to explain the nature of virtue, of the moral sense, and of moral obligation.

A Compendium of Logic is prefixed, as a proper introduction to the investigation of subjects of an abstract and metaphysical nature. The formality of syllogistic reasoning is indeed justly laid aside in modern composition: but the ability to define correctly, to think justly, to analyse a complex process of argumentation, to detect plausible sophistry, and to arrange ideas and reasonings in a clear and luminous method, will always be of use.

Just views of human nature, and of moral obligation, have a tendency to impress upon the mind a proper sense of the inestimable value of the Christian revelation, which places the doctrine of a future life upon the only foundation which true philosophy can approve, a resurrection of the dead ; and which, by the assurance of this interesting fact, reconciles human nature to itself, and enforces the practice of virtue by the most efficacious and awful sanctions. The truth, and importance of genuine Christianity, is the grand conclusion which the author wishes to establish : for he is firmly persuaded that to be a rational and practical believer in the Christian religion, is to employ the noblest powers of human nature under the best direction, and for the attainment of the best ends : it is to be wise, virtuous, and happy.

HACKNEY,
July 3, 1801.

CONTENTS

OF THE

COMPENDIUM OF LOGIC.

INTRODUCTION.	—	—	PAGE iii
----------------------	---	---	-------------

PART THE FIRST.

OF PERCEPTION.

	—	—	
	—	—	
Of Simple Ideas.	—	—	vii

SECT. II.

Of Complex Ideas : of Substance and Mode.	—	—	x
---	---	---	---

SECT. III.

Of Voluntary Collections of Ideas.—Of Composition, and Mixed Modes.	—	—	xiii
---	---	---	------

SECT. IV.

Of Abstraction and of Universal Ideas, of Comparison, and Relations.	—	—	xvi
--	---	---	-----

SECT. V.

Concerning Words as the Signs of Ideas.	—	—	xxii
---	---	---	------

SECT. VI.

Of Definition.	—	—	xxv
----------------	---	---	-----

PART THE SECOND.

OF JUDGMENT,

SECT. I.

Of Judgment and Evidence.	—	—	xxxi
---------------------------	---	---	------

SECT. II.

Of the Nature of Propositions. Division of them into Affirmative and Negative.	—	—	xxxiv
--	---	---	-------

SECT. III.

Of Universal and Particular Propositions. Of Opposite and Subaltern Propositions. —	xxxix
--	-------

SECT. IV.

Of Absolute and Modal, of Simple, Compound, and Disjunctive Propositions. — —	xli
--	-----

SECT. V.

Of Propositions True and False, Certain and Un- certain, Intuitive and Demonstrable. —	xlili
---	-------

PART THE THIRD.

OF REASONING.

SECT. I.

Of Reasoning, and of the Structure of Syllogisms. —	xlvi
---	------

SECT. II.

General and Special Rules of Syllogism demon- strated from their First Principles. —	xlix
Definitions. — — —	ibid.
Axioms. — — —	li
General Rules of Syllogism. — —	liii
Moods of Syllogism. — —	lxiv
Figures of Syllogism. — —	lxv
Special Rules of Syllogism. — —	lxvi
Examples of Syllogism. — —	lxxv

SECT. III.

Compound and Imperfect Syllogisms. —	lxxvi
--------------------------------------	-------

SECT. IV.

Topics. Different Kinds of Arguments. —	lxxxiv
---	--------

SECT. V.

Doctrine of Sophisms. — —	lxxxvii
---------------------------	---------

PART THE FOURTH.

DISPOSITION AND METHOD. — —	xc
-----------------------------	----

CONTENTS

OF THE

ELEMENTS OF THE PHILOSOPHY OF THE HUMAN MIND.

INTRODUCTION.

	SECT. I.	PAGE
N ATURE and Use of the Philosophy of Mind.	I.	1
	SECT. II.	
Rules of Philosophising. Of Philosophical Hy- potheses.	— — —	5

CHAPTER I.

GENERAL ENUMERATION OF THE FACULTIES. OF PERCEPTION.

	SECT. I.	
General Account of the Faculties of the Mind. Hy- pothesis of Common Sense.	— —	10
	SECT. II.	
Of Perception. Seat of the Sentient Principle.	—	15

CHAPTER II.

OF THE CAPACITY FOR PLEASURE AND PAIN. 20

CHAPTER III.

OF THE LAW OF ASSOCIATION, AND OF THE THE- ORIES WHICH HAVE BEEN PROPOSED FOR EX- PLAINING THE PHENOMENA OF THE MIND.

	SECT. I.	
Of the Law of Association.	— —	22
A 4		SECT.

SECT. II.

The same Subject continued. — — 30

SECT. III.

Cartesian Theory of Animal Spirits. — 35

SECT. IV.

Newtonian Theory of Vibrations. — 38

SECT. V.

The Theory of Vibrations applied to the Phenomena
of Muscular Motion. Objections answered. 45

CHAPTER IV.

OF SENSATION.

SECT. I.

General Distribution. Sense of Feeling. 56

SECT. II.

Sense of Taste. — — — 64

SECT. III.

Sense of Smelling. — — — 72

SECT. IV.

Sense of Sight. Form of the Eye. Nature of Vision. 77

SECT. V.

Sensations of Sight. — — — 80

SECT. VI.

Sense of Sight continued. Ideas. Intellectual Plea-
sures and Pains, Motions Automatic and Vo-
luntary. — — — 90

SECT. VII.

Sense of Hearing. — — — 95

N. B. By an error of the Press, the two last Sections
are numbered VII and VIII instead of VI and VII.

CONTENTS.

KI

CHAPTER V.

OF THE INTELLECT.

SECT. I.

PAGE

Of Truth and Falschhood ; Knowledge and Opinion ; Probability and Improbability ; Assent and Dissent ; Nature and Kinds of Evidence; —	106
--	-----

SECT. II.

Of Words and Propositions ; Use of Words for the Acquisition of Knowledge ; Different Kinds of Propositions. — —	113
--	-----

SECT. III.

Origin of Assent to various Classes of Propositions. Remarks. — — —	118
--	-----

SECT. IV.

Concerning Innate Ideas and Principles. Evidence of the Senses. Existence of the Material World.	128
---	-----

CHAPTER VI.

OF MEMORY.

SECT. I.

Phenomena of Memory. — —	133
--------------------------	-----

SECT. II.

Of Succession and Duration. — —	141
---------------------------------	-----

SECT. III.

Existence of Space. — — —	149
---------------------------	-----

SECT. IV.

Concerning Identity. — — —	155
----------------------------	-----

SECT. V.

Whether Consciousness be ever interrupted.	166
--	-----

CHAP.

CHAPTER VII.

OF THE IMAGINATION.

SECT. I.

PAGE

Phænomena of the Imagination, Reveries, Dreams. 170

SECT. II.

Of Imperfections in the Rational Faculties. 174

SECT. III.

Phænomena of Brutes analogous to the Faculties of the Human Mind. Perciency of Vegetables. 180

CHAPTER VIII.

CONCERNING THE AFFECTIONS NATURAL AND ACQUIRED.

SECT. I.

Concerning Instinct. ——— 189

SECT. II.

Concerning Habit. ——— 193

SECT. III.

Of Wit. ——— 200

SECT. IV.

Origin of the Affections. ——— 206

SECT. V.

Classification of the Affections. ——— 213

CHAPTER IX.

OF THE WILL. . DISCUSSION OF THE DOCTRINES OF LIBERTY AND NECESSITY.

SECT. I.

The Question stated. ——— 227

SECT. II.

Arguments in favour of Philosophical Liberty. 233

SECT.

CONTENTS.

XIII

SECT. III.

	PAGE
Doctrine of Necessity. Argument from Conscience. — — — —	239

SECT. IV.

Argument from Cause and Effect. — —	247
-------------------------------------	-----

SECT. V.

Objections against Philosophical Liberty. —	256
Obj. 1. Free-will an Absurdity. — —	257
Obj. 2. Liberty of little Use. — —	258
Obj. 3. Confounds the Distinction between Virtue and Vice. — — —	ibid.
Obj. 4. Dangerous to Virtue. — —	259

SECT. VI.

Objections continued.

Obj. 5. Philosophical Liberty inconsistent with Moral Discipline. — — —	261
Obj. 6. Inconsistent with Divine Prescience. — —	267
Obj. 7. Leads to Atheism. — —	269
Obj. 8. Inconsistent with Moral Perfection, both in God and his Creatures. — —	270

SECT. VII.

Objections against Philosophical Necessity stated and answered. — — —	275
Obj. 1. That Necessity is reducible to a Contradiction. — — —	276
Obj. 2. That Mankind are under perpetual Delusion. — — —	277
Obj. 3. That Necessity is inconsistent with Agency, Virtue and Merit. — —	280
Obj. 4. That Necessity is inconsistent with Moral Discipline, and the Justice of Reward and Punishment. — — —	281

Obj. 5.

	PAGE
Obj. 5. That Necessity confounds Natural and Moral Qualities. — —	282
Obj. 6. That Necessity encourages Vice and supercedes Repentance. — —	283

SECT. VIII.

Objections continued.

Obj. 7. That Necessity discourages all Attempts for the Reformation of others. —	289
Obj. 8. That Necessity makes God the Author of Evil.	289
Obj. 9. That Necessity is inconsistent with the Veracity of God. — —	294
Obj. 10. That Necessity involves Fatalism, and discourages Exertion. — —	295

SECT. IX.

Recapitulation and general Observations. —	297
--	-----

SECT. X.

Recapitulation continued. — —	303
Beneficial Consequences of the Doctrine of Necessity.	313

CHAPTER X.

CONCERNING POWER. 319

Power considered as an Attribute of inanimate Substances. — — —	ibid.
Power as an Attribute of Mind. — —	323

CHAPTER XI.

CONCERNING IMMATERIALITY AND MATERIALISM.

SECT. I.

The Question stated. — — —	330
Arguments for the Hypothesis of Immaterialism.	331
Arguments for the Hypothesis of Materialism.	333

SECT. II.

Objections against the Hypothesis of Materialism stated and solved. — — —	334
Obj.	

CONTENTS.

XV

	PAGE
Obj. 1. From the Solidity of Matter. —	335
Obj. 2. From the Divisibility of Matter. —	337
Obj. 3. From the Inertia of Matter. —	339
Obj. 4. From the Impercipiency of Ultimate Atoms. — — — —	ibid.
General Remarks. — — —	342

CHAPTER XII.

CONCERNING THE NATURAL EVIDENCE OF A FUTURE LIFE.

SECT. I.

INCONCLUSIVE ARGUMENTS.

Argument 1. Immateriality and Natural Immortality of the Soul. — — —	345
Arg. 2. Desire of Life, and Horror of Annihilation.	347
Arg. 3. Instinctive Principle of Conscience.	348
Arg. 4. Capacity for progressive and endless Improvement. — — — —	349
Arg. 5. Justice of God. — —	350
Arg. 6. Probability of future Life greater than the antecedent Probability of actual Existence.	353

SECT. II.

Probable Arguments for a future Life. —	354
Argument 1. Capacity of expecting a future Life, and of being influenced by it. — —	356
Arg. 2. Moral Constitution of Human Nature. —	ibid.
Arg. 3. Appearances of a Moral Government over the World. — — —	357
Arg. 4. The Pains of Death. — —	358
Arg. 5. Provision made for the Discipline of the Mind. — — — —	359
Arg. 6. General Expectation of a future Life.	360
Remarks and Conclusion. — —	362

CONTENTS

OF THE ELEMENTS OF MORAL PHILOSOPHY.

	PAGE
SECT. I.	
DEFINITION of Virtue and Vice. Distinction between Natural and Moral Qualities. —	369
SECT. II.	
Objections answered. — — —	372
SECT. III.	
Objections continued. Theory of the disinterested Affections: Reconcilableness of Benevolence with Self-Interest. — — —	375
SECT. IV.	
Moral Obligation explained: Antecedency of different Obligations. — — —	381
SECT. V.	
Of the Moral Sense. Abstract Ideas of Right and Wrong. Fit and Unfit. — — —	384
SECT. VI.	
Inferences from the Analysis of the Moral Sense. —	389
SECT. VII.	
Moral Value of an Action estimated. —	392
SECT. VIII.	
Moral Value of Character. — — —	397
Corollaries. — — —	401
SECT. IX.	
Analysis of the Ideas of Merit and Demerit. Approbation and Disapprobation. Praise and Blame. Reward and Punishment. Also of Fear, Shame, Remorse and Repentance. — — —	403
SECT.	

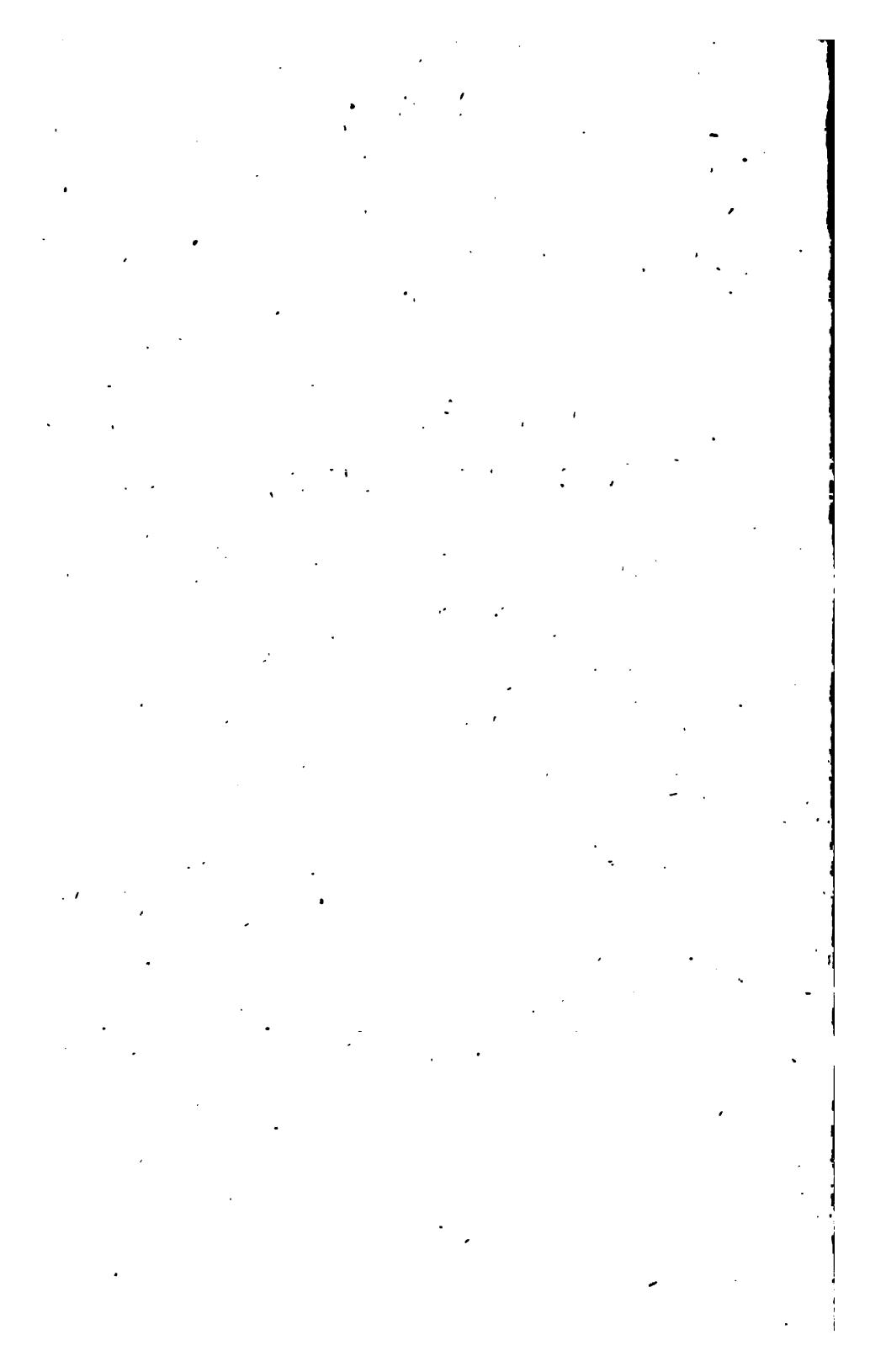
CONTENTS.**XVII**

	PAGE
SECT. X.	
Means of Virtue. — — —	408
SECT. XI.	
Observations on the preceding Rules. —	415
SECT. XII.	
Theories of Dr. Clarke, Dr. Hutcheson, Dr. Butler, Dr. Reid, and Dr. Price. — —	418
SECT. XIII.	
Theories of Wollaston, Cumberland, Rutherford, Browne, and Adam Smith. — —	424
SECT. XIV.	
Hume's Theory of Morals. In what Sense Utility is the proper Standard of Virtue. —	429
SECT. XV.	
Account of Virtue, by Dr. Hartley, Dr. Paley, Mr. Cooper, Mr. Gisborne, and Mr. Godwin.	433



A
COMPENDIUM
OF
LOGIC.

Dialectica est, utilis sæpe, et finitionibus,
et comprehensionibus, et separandis quæ sunt differentia,
et resolvenda ambiguitate, et distinguendo, dividendo,
illiciendo, implicando. QUINTILIAN.



A
COMPENDIUM

OF

LOGIC.

INTRODUCTION.

THE use of LOGIC is to guide and assist the intellectual powers in the investigation of truth, and the communication of it to others.

This end it accomplishes by tracing the progress of the intellect in the acquisition of knowledge, and thus suggesting the best method of avoiding error and discovering truth.

Hence it follows that logic is not, as some have supposed, a mere explanation of scholastic phrases, nor, as others have imagined, the art of disputing by mechanical forms; but it is one branch of the theory of the human mind applied to a valuable practical purpose.

PERCEPTION, JUDGMENT, REASONING, and **DISPOSITION**, are the operations of the mind in the acquisition and communication of knowledge.

Hence Logic is usually divided into four parts, corresponding with these four operations of the mind.

PERCEPTION, is the attention which the mind pays to impressions made upon it.

The results of perception are, **SENSATIONS** and **IDEAS**. These are the materials of all our knowledge.

WORDS, are the expressions of ideas.

JUDGMENT, is the association or separation of ideas, correspondent to the perception of their agreement or disagreement.

The result of this operation is called a **JUDGMENT**, or a mental proposition; the expression of a judgment is called a **VERBAL PROPOSITION**, or simply a proposition.

REASONING, is determining the relation between two ideas, by comparing them with a third idea, or middle term.

The result of reasoning is an **INFERENCE**. The expression of an act of reasoning is called a **SYLLOGISM**; for example,

A Cre-

INTRODUCTION.

v

A Creator is to be worshipped,
God is a Creator,

Therefore, God is to be worshipped.

All reasoning is founded upon intuitive principles, and is the chief means of extending knowledge.

DISPOSITION, is the proper arranging of our ideas upon any subject.

The result of disposition is METHOD*.

- * Duncan's Logic, Introduction.
Bentham's Reflections on Logic.



PART THE FIRST.

OF PERCEPTION.

SECTION I.

Of Simple Ideas.

PERCEPTION, is the attention which the mind pays to a variety of impressions made upon it by external objects, or by internal feelings; or, it is the faculty by which we acquire sensations and ideas.

Of perception there are two modes, Sensation and Reflection.

SENSATION is the perception of an object by the organs of sense; these are sight, hearing, taste, smell, and touch.

REFLECTION is the mind's perception of its own faculties and operations.

By perception we acquire sensations and ideas.

A SENSATION, is the impression made upon the mind by an object actually present.

AN IDEA, is a revived impression in the absence of the object.

The objects of our ideas are called archetypes.

Ideas of Reflection, in the attainment of which the mind is voluntary and active, are acquired later than ideas of Sensation, in the reception of which the mind is wholly passive.

Ideas are either Simple or Complex*.

SIMPLE IDEAS are such as exist in the mind under one uniform appearance, and cannot be divided into two or more ideas: for example, a colour, a sound.

COMPLEX IDEAS, are such as may be divided into two or more simple ideas, as matter, gold, a circle, a square.

Simple ideas may always be traced up to Sensation, or Reflection, or both.

* Dr. Hartley, in his *Observations on Man*, defines simple ideas to be ideas of sensation of individual objects. Complex ideas are formed by the coalescence of simple ideas, and are what he calls intellectual ideas. This is unquestionably the most accurate account of our ideas. But Mr. Locke's definition being more intelligible to learners, I have for this reason retained it; and perhaps it would have been better if Dr. Hartley had used the words *single* and *compound*, rather than terms to which long custom had annexed a different sense, and the use of which tended to throw obscurity upon his admirable theory.

Of

Of simple ideas some may be traced up to *one* Sense only, as light, sound, hardness, smoothness.

Some to *more* Senses than one, as extension. But it may be questioned whether visible and tangible extension be not as different as any other two ideas of different senses.

Some ideas may be traced up to* Reflection only, as thought, volition, and the like.

And some to every mode both of Sensation and Reflection, as existence, unity, succession, pleasure, and pain†.

Of simple ideas it may be observed,

1. That the mind has no power of inventing new ones.

2. That they enter the mind only by inlets appropriated to this purpose.

3. That, when certain impressions are made upon the senses, the mind cannot refuse to receive the corresponding ideas.

4. That these ideas are incapable of change.

* According to Hartley's theory, ideas of reflection are nothing more than very complex ideas of sensation; but there is a sufficient difference between these and the primary ideas of sensation to lay a foundation for Mr. Locke's distinction of them into the two classes of sensation and reflection.

† Locke's *Essays on Hum. Underst.* book ii. ch. xxvii.

5. That

his component principles, which are again formed into different combinations, and so on, ad infinitum.

Hence it has been concluded, that matter is an uniform substance ; in other words, that all ultimate atoms possess the same essential properties ; and that the variety observable in different substances is entirely owing to the various arrangement of their constituent particles.

Hence arises the distinction between the real and the nominal essences of *substances*.

The *real essence* of any substance is that peculiar contexture of its constituent particles upon which its peculiar properties depend.

Of real essences we know nothing ; only that in different substances they must necessarily be different.

The *nominal essence* is that collection of properties which constitutes our idea of any substance, and to which the *name* is constantly applied.

Our ideas of substances extend no farther than to their properties ; how these properties are combined we know not.

MODES, are either essential or accidental.

An

An *essential* mode is that which is necessary to the existence of its subject, as roundness to a bowl.

An *accidental* mode is that which is not necessary to the existence of its subject, v. g. roughness to a bowl.

Writers on logic commonly add many other distinctions of modes, such as absolute and relative, intrinsic and extrinsic, inherent and adherent, and the like, which for the sake of brevity are not enumerated here*.

SECTION III.

Of Voluntary Collections of Ideas.—Of Composition and Mixed Modes.

THE SECOND class of complex ideas consists of Collections formed at the pleasure of the mind.

In the production of these ideas the mind exerts three voluntary acts, COMPOSITION, ABSTRACTION, and COMPARISON.

* Duncan's Logic, book i. ch. vi.

Locke's Essay, book ii. ch. xii. xiii. book iv. ch. vi.

Watts's Logic, part i. ch. xi. sect. iii. iv.

COMPOSITION, is joining together two or more simple ideas, and considering them as one picture or representation.

ABSTRACTION, is separating from a particular idea those circumstances which render it the representative of a single determinate object, and thereby making it to denote a whole rank or class of things.

COMPARISON, is bringing two or more ideas at once into the view of the mind, and examining their mutual correspondencies.

Ideas acquired by composition are by Mr. Locke called simple or mixed modes. Ideas formed by abstraction are denominated abstract or universal ideas. And from comparison we gain our ideas of relations.

FIRST, COMPOSITION is the uniting of many conceptions into one.

I. The mind sometimes combines ideas of the same kind, and sometimes of different kinds.

Simple ideas of the **SAME KIND** which are capable of composition, are number, extension, and duration. Combinations of these ideas are called by Mr. Locke **SIMPLE MODES**.

UNITY is a simple idea, capable of perpetual addition to itself.

The

The great exactness with which the mind classes its ideas of number, and the paucity of the terms made use of to express these combinations, renders it very easy to arrange and manage the most complex ideas of this class.

Ideas of DURATION and EXTENSION become clear and distinct, in consequence of their connexion with ideas of number.

From the perpetual addibility of the ideas of number, space, and duration, the idea of INFINITY is acquired.

The facility with which very complex ideas of number are managed, shows the great advantage of a proper arrangement of ideas in general. In proportion to the excellence of method, *ceteris paribus*, will be the extent and precision of knowledge, and the facility of attaining or recollecting our ideas.

II. The mind frequently combines ideas of DIFFERENT KINDS, as harmony, gratitude, treason, heroism. These are denominated by Mr. Locke MIXED MODES.

The power which the mind possesses of framing ideas of this class is boundless. It is directed in the exercise of it by the occasion it has for various combinations of ideas.

To

To combinations which frequently recur, NAMES are usually given, which serve to connect the ideas and to suggest them to the mind, as king, judge, actor, merchant, and the like.

Combinations of ideas which are common in one age and country are unusual in another, and many combinations of ideas occur frequently in the arts and sciences, which do not occur in common life.

Hence it happens that some words in process of time become obsolete, and new ones are invented. Hence there are in all languages words which cannot be translated without circumlocution into other languages; and hence likewise all arts and sciences have terms peculiar to themselves which do not occur in common life*.

SECTION IV.

Of Abstraction and Universal Ideas.—Of Comparison and Relations.

THE SECOND act of the mind in the formation of complex ideas is ABSTRACTION.

* Duncan's Logic, ch. iv. sect. i.

ABSTRACTION is the attention of the mind to those properties in any object which it possesses in common with others, while it overlooks those which are peculiar to it. Hence we acquire **UNIVERSAL IDEAS***.

All our ideas are originally particular.

* According to this definition of abstraction, an abstract idea resembles a mathematical diagram, which, though an individual object, is nevertheless the representative of a class of figures; those properties only being taken into account in which it agrees with other figures. This seems to have been the opinion of Bishop Berkeley. Berkeley's Princip. Introd. sect. 6—20.

The true notion of abstraction, however, according to the Hartleyan theory, is the intimate coalescence of a multitude of simple, or single ideas into one complex idea; which idea, though compounded of a great number of parts, often bears no resemblance to any of its constituent principles, but, like the whiteness of the sun's light, which is compounded of the seven primary colours, assumes a simple appearance in the mind, and is frequently mistaken for a simple idea. Thus the abstract idea of man, house, horse, or dog, is formed by the coalescence of the ideas of all the individual objects to which the words man, house, &c. have been applied. Hence it follows, that Mr. Locke's account of abstract ideas, though he did not perfectly understand the theory of them, is by no means deserving of the ridicule so liberally bestowed upon it by Berkeley.—Hartley, vol. i. prop. 12. Priestley's Abridgement of Hartley, Introduction, essay lii.

Comparing together a number of PARTICULAR ideas, we observe some properties which they possess in common ; to this collection of properties we assign a name which denotes a SPECIES, as man, horse, &c. and the like.

Comparing various species, we find some particulars in which they agree. To these we annex a name, and call it a GENUS ; thus horse, dog, sheep, elephant, &c. agree in the property of being living creatures, with four feet. Hence we form the genus *quadruped*, and all creatures having these properties are said to belong to this genus.

Comparing together various genera, we discover some properties in which they all agree. This collection of properties with the addition of a name, forms a SUPERIOR GENUS ; thus man, beast, bird, fish, insect, reptile, agree in the common properties of animal, that is in perception, and voluntary motion, united to organized bodies. *Animal* therefore is a superior genus, of which man, bird, &c. are species.

Advancing in the comparison of genera, we at last find one property common to all things which exist ; namely, BEING. This,

therefore, is the highest genus, which logicians call **GENUS GENERALISSIMUM**.

Genus generalissimum is never considered as a species. The lowest species, which extends only to individuals, and is never considered as a genus, is called **SPECIES SPECIALISSIMA**. Intermediate classes, which are sometimes genera, and sometimes species, are called *subordinate genera*.

Universal properties are those in which many individuals agree. *Universal ideas* are representations of these properties. *Universal terms* are the expressions of universal ideas.

SINGULAR or **PARTICULAR** ideas are the ideas of individuals, as Sir Isaac Newton.

COLLECTIVE IDEAS, are ideas which represent a number of individuals, as an army, a flock.

The **PROXIMATE GENUS** of any species, is the genus immediately above it, or that collection of properties, which it possesses in common with the fewest classes of beings. Thus, quadruped is the proximate genus of Horse. The **REMOTE GENUS**, is genus generalissimum, or that property which it has in common with all other beings, as existence. Other genera are called **INTERMEDIATE**.

SPECIFIC DIFFERENCE, is that property, or collection of properties, which distinguishes the species from the proximate genus, and from all species under the same genus. Thus, creature is the proximate genus of animal; and perception, and voluntary motion by means of corporeal organs, is the specific difference by which animal is distinguished from creature, the genus, and from vegetable, another species under the same genus. Plane rectilinear figure is the proximate genus of triangle: having three sides, and three angles, is the specific difference.

Hence it follows that proximate genus comprehends all the *common* properties, and specific difference all the *peculiar* properties, of an universal idea.

NUMERICAL DIFFERENCE, is that collection of properties which distinguishes an individual from the species specialissima, and from every individual under the same species. Man is the species specialissima of Julius Cæsar. The peculiarities of time, place, birth, figure, exploits, and other incidents, constitute the numerical difference which distinguishes Julius Cæsar from the rest of the species.

Hence

Hence it follows that species specialissima comprehends all the *common* properties, and numerical difference all the *peculiar* properties, of a particular idea.

Universal ideas are considered according to their *comprehension* and their *extension*.

The COMPREHENSION of an idea expresses the collection of simple ideas contained in a complex one. The EXTENSION of an universal idea respects the number of species and individuals included under it.

Genera and species are creatures of the mind, and not, as formerly supposed, models of substances existing in nature. They are contrivances of the intellect, invented for the convenience of classing its ideas.

Genus, Species, Difference, Property, and Accident, are called the *five predicables*; for whatever is predicated or affirmed of any subject must be one or other of these*.

The THIRD act of the mind in the formation of complex ideas, is COMPARISON; by which two or more objects being brought

* Duncan's Logic, book i. ch. iv. sect. ii.

Watts's Logic, book i. ch. iii. sect. iii.

Locke's Essay, book ii. ch. xi. sect. ix. — xiii,

at once into the view of the mind, their mutual correspondencies are discovered.

Hence arise our ideas of RELATIONS, such as greater and less, older and younger, father and son, king and subject, creator and creature, and the like.

Ideas of relation are very numerous. The mind is directed in the choice of them, and in annexing words to them, by the frequency of their occurrence.

Ideas of relation are of the highest importance, the duties of life depending upon the relations which moral agents sustain with regard to each other.

Ideas of relation are often clear, when the subjects of these relations are very imperfectly known, as creator and creature, cause and effect, and the like*.

SECTION V.

Concerning Words as the Signs of Ideas.

WORDS, are articulate sounds, used as the signs of ideas.

* Duncan's Logic, book i. ch. iv. sect. iii.

Locke's Essay, book ii. ch. xxv.

The connexion between words and ideas is perfectly arbitrary. The want of attention to this circumstance has been the source of innumerable errors in judgment and reasoning.

By frequent use, a term becomes so strongly associated with an idea that it never fails to suggest it, and conversely, the idea with the name.

The use of words is to record our own trains of ideas, and to communicate our thoughts to others.

Our own ideas are recorded, by being clothed in words, and committed to writing.

Men communicate their thoughts to each other by language, in consequence of an agreement, tacit or express, to annex the same ideas to the same words.

All language may be resolved into nouns and verbs, with their respective abbreviations.

Nouns express names of things: they are divided into substantives, which are the principal things spoken of; and adjectives, which denote qualities, or circumstances belonging to them.

Verbs express modes of existence. They are of three kinds, such as denote simple

existence; for example, to be: such as express existence in an active state; for example, to eat: and such as express existence in a passive state; as, to be eaten.

Words which are usually represented as indeclinable particles, having no determinate signification of their own, are abbreviations of nouns or verbs, invented for the greater expedition of communicating our thoughts. Thus, *If* signifies give; *And* signifies add, being imperatives of corresponding verbs. See this theory of language stated and evinced in Mr. Horne Tooke's *Diversions of Purley**.

As simple ideas are the elements of all knowledge, so words expressive of simple ideas are the elements of language, beyond which we cannot explain the meaning of terms.

Names of simple ideas standing for simple perceptions only, are of all words the least ambiguous.

Words are properly only the signs of a man's own ideas; but they are secretly, though improperly, used as the signs of other

* Horne Tooke's *Diversions of Purley*, præs. page 185.
Darwin's *Zoonomia*, vol. i. page 531.

men's ideas, and also of objects really existing.

Words expressive of intellectual ideas, such as understanding, imagination, and the like, are generally borrowed from sensible objects. This circumstance points to the origin of our knowledge, and indicates, that sensible ideas are the first which gain admission into the mind*.

SECTION VI.

Of Definition.

DEFINITION, is the explanation of the meaning of a word.

All words capable of definition, express either simple or complex ideas.

Words which express simple ideas may be explained either, 1, by an intelligible synonymous word ; or, 2, by a reference to the archetype of the idea. Thus, *vert* signifies *green* ; or, it is the colour of grass.

Words expressing complex ideas may be explained, 1, by a synonymous term ; or, 2,

* Duncan's Logic, book i. ch. v.

Locke's Essay, book iii. ch. i. ii.

by referring to the archetype; or, 3, by enumerating the simple ideas comprehended in the complex idea.

Thus, for example, *verre* is *glass*; or, it is the substance of which windows are made; or, it is a substance, transparent, brittle, elastic, &c. &c.

The explication of words by synonymous terms, or by reference to the archetypes of the ideas, is called by logicians the DEFINITION OF THE NAME.

The explication of a term expressive of a complex idea, by the enumeration of its component simple ideas, is called the DEFINITION OF THE THING; our ideas being supposed, though erroneously, to be representations of things.

The resolution of a very complex idea immediately into its component simple ideas would puzzle and confound the understanding, as if a person should attempt to convey a distinct idea of an army of a hundred thousand men, by repeating the names of all the individuals.

The method in which the mind attains a distinct view of a very complex idea, is by dividing it into a few large parts; subdividing
ing

ing each large division into smaller ; and each smaller division into less ; till at last it resolves the whole complex idea into its constituent simple ones, or at least into parts so small that it can easily comprehend each.

Thus a million is divided into ten hundreds of thousands ; each hundred thousand into ten ten-thousands ; each ten-thousand into ten thousands ; each thousand into ten hundreds ; each hundred into ten tens ; and each ten into ten units.

Upon this principle logicians have proceeded, in the rules they have laid down for the resolution of a complex idea, or what they call, the definition of the thing.

All objects, consequently all ideas of objects, have some properties in common with other objects, and ideas, and some peculiar to themselves.

If a person desirous of resolving a very complex idea into its constituent principles, should express all the common properties by one term, and should either enumerate the special properties, or express them together by another term, it is evident that he divides the given idea into its larger parts. Thus, *quadruped is an animal, with four feet.*

If

If the common properties be expressed by a term not sufficiently intelligible, and if he proceed farther to divide this complex idea in the same manner into its common and special properties, he will then have resolved the original idea into still smaller parts. Thus, animal is a *creature*, which perceives and moves, by means of corporeal organs.

If in this manner he proceeds with the several parts of the complex idea, he will gradually reduce it to its component simple ideas, and render it perfectly comprehensible to the mind. Thus, *creature*, is derived substance; *substance* is being self-subsisting; *being* is a simple idea.

In conformity to these principles, logicians have laid down their rules for the definition of all complex ideas, whether universal or particular; that is, for the definition of the thing.

TO DEFINE AN UNIVERSAL IDEA, "join
"the name of the proximate genus, with the
"specific difference."

For example, a quadruped is an animal, with four feet. A square is a quadrilateral figure, having four equal sides and four right angles.

To

TO DEFINE A PARTICULAR IDEA, "join
"the name of the species specialissima, with
"the numerical difference."

Thus, Sir Isaac Newton, was an English-
man who was born in such a place, at such a
time, who was of such a stature, complexion,
&c. who possessed such and such talents, and
who made such and such extraordinary dis-
coveries in philosophy, &c. &c.

Definitions of individuals are called DE-
SCRIPTIONS.

If the term which expresses the species
specialissima, or the proximate genus, be not
understood, it will be necessary to define it
according to the rule, and so on till you come
to genus generalissimum, which is a simple
idea and therefore indefinable. By this
means the original idea, how complex so-
ever, is gradually resolved into its component
simple ideas.

This rule of definition is *complete*, for it
comprehends all the common, and all the pe-
culiar properties of the thing defined.

The rule of definition is also *universal*, for
all complex ideas are either universal or par-
ticular, or, in other words, they represent
either species or individuals.

Universal

Universal ideas, in their ascent from individuals to genus generalissimum, become gradually more simple; losing the specific difference, that is, the peculiar properties of some species, in every step of the progress.

Universal ideas, in their descent from genus generalissimum to individuals, become gradually more complex, taking up in every step of the progress the specific difference, or peculiar properties of some species, till they reach the individual, which is the most complex of all ideas*.

* Duncan's Logic, book i. ch. vi. vii.

Locke's Essay, vol. ii. book iii. ch. xi. sect. 14—22.

Watts's Logic, part i. ch. vi. sect i.

END OF THE FIRST PART OF LOGIC.

PART

PART THE SECOND.

OF JUDGMENT.

SECTION I.

Of Judgment and Evidence.

WHEN two ideas are compared together, they either concur, as milk and whiteness ; or they coincide, as God and Creator ; or they do not concur, as vice and usefulness ; or they do not coincide, as man and brute.

The CONCURRENCE or COINCIDENCE of ideas, or the want of this concurrence or coincidence, is perceived either immediately, or by the intervention of a third idea.

The immediate perception of the concurrence or coincidence of two ideas, or of the want of concurrence or coincidence, is called JUDGMENT.

This is the SECOND OPERATION of the mind in the acquisition of knowledge, and is to be distinguished from REASONING, which is the perception of the concurrence or coincidence

cidence of two ideas, or of the want of it, by the intervention of some third idea, as will hereafter be explained.

The SOURCES of Judgment are Consciousness, Sense, Intuition, and Testimony.

CONSCIOUSNESS is the mind's perception of its own existence, faculties, and operations.

The SENSES teach us the existence, properties, and powers of external objects, and the co-existence of different properties in the same substance.

For example: we learn by the senses that matter exists, that milk is white, that fire dissolves wax and hardens clay, that glass is brittle and transparent, that gold is malleable and fusible, &c.

The senses do not teach us the real essences of substances, the original causes of their peculiar properties and powers, nor the reason of the coexistence of different properties in the same substance.

Observations of the senses are the foundations of natural knowledge, and of what is called Experimental Philosophy.

INTUITION, is the perception of the relation between two ideas by the immediate inspection

inspection of the mind, as the whole is greater than its part*.

Intuition is the foundation of demonstration, and the knowledge so acquired is called, by way of eminence, *Science*.

TESTIMONY, is the criterion of facts which do not fall immediately under our own observation.

Most of our natural knowledge is acquired by testimony, the experiments which can fall under the cognizance of any individual, being very few in comparison with the whole compass of natural philosophy; but all knowledge of this kind is ultimately founded upon experiment.

The proper province of testimony is the proof of facts, which, having happened in past times, or in distant places, have not fallen under the cognizance of the senses.

* Properly speaking, Intuition is not a distinct mode of knowledge. Intuitive propositions are general inferences from the most obvious sensible appearances. Thus, The whole is equal to all its parts, is not assented to in consequence of an intuitive perception of the coincidence of abstract ideas, but as a fact verified by constant invariable observation.—Vid. Hartley, part i. prop. 86. Beddoes's *Observations on Mathematical Evidence*.

the predicate with the subject, as, Virtue is wisdom.

A NEGATIVE PROPOSITION, separates the predicate from the subject, as, God, is not, a tyrant.

The negative particle belongs to the copula, whose property it is to unite or separate the terms of the proposition*.

In an affirmative proposition the predicate is taken in its whole *comprehension*, that is, every property of the predicate is affirmed of the subject. Thus, when it is said, Man is an animal, every idea included in animal is predicated of man.

In a negative proposition the predicate is taken in its whole *extension*, that is, all species and individuals of the predicate are denied of the subject. Thus, in the proposition, Vegetables are not animals, all species of animals are denied of vegetables.

* Duncan's Logic, part ii. ch. ii.

Locke's Essay, book iv. ch. v.

Watts's Logic, part ii. ch. i. ii. sect. ii.

SECTION III.

*Of Universal and Particular Propositions—of
Opposite and Subalternate Propositions.*

THE SECOND division of propositions is into UNIVERSAL and PARTICULAR.

AN UNIVERSAL PROPOSITION, is a proposition the subject of which is an universal idea, and the predicate extends to the whole of the subject ; as, All men are mortal ; No man is perfectly happy.

The signs of an universal proposition are usually the words all, every, no, none.

A PARTICULAR PROPOSITION, is a proposition the subject of which is an universal idea, but the predicate is limited to a part of the subject. The signs of this class of propositions are, usually, the words some, many, few ; as, Some men are wise ; Many philosophers have fallen into error.

COLLECTIVE PROPOSITIONS, are propositions the subject of which is a collective idea : as, The Greeks were a polished people ; The Romans conquered the world.

A SINGULAR PROPOSITION, is a proposition the subject of which is a singular idea, or an individual; as, Sir Isaac Newton was the inventor of fluxions.

Collective propositions are generally singular propositions, the universal epithets which are sometimes used, only serving to combine the various ideas comprehended under the universal term which is the subject of the proposition.

INDEFINITE PROPOSITIONS, are those in which the subject is indefinitely expressed. These are generally universal propositions, but in some cases they may be particular; as, men, that is all men, are mortal; the virtuous, that is the majority of the virtuous, are happy.

In singular propositions the predicate necessarily belongs to the whole subject; consequently, though with respect to the subject they are of all propositions the most particular, they are nevertheless uniformly governed by the rules of universals; and by logicians they are classed as such.

All propositions are either universal or particular; and they are all either negative
or

or affirmative: all propositions therefore are reducible to four classes, universal affirmative, universal negative, particular affirmative, or particular negative.

These several classes of propositions are by logicians distinguished by the vowels A, E, I, O, of which A, signifies universal affirmative; E, universal negative; I, particular affirmative; and O, particular negative, according to the following distich:

Afferit A, negat E, verum generaliter ambæ.

Afferit I, negat O, sed particulariter ambo.

Propositions, as they are affirmative or negative, are said to differ in **QUALITY**; as universal or particular, they differ in **QUANTITY**.

If two propositions differ in quality, they are called **OPPOSITE**; if in quantity the particular is said to be **SUBALTERN** to the universal.

Of **OPPOSITE** propositions there are three classes; **CONTRADICTORY**, **CONTRARY**, and **SUBCONTRARY**.

Propositions differing both in quantity and quality, are called **CONTRADICTORY**. Of these one must be true, and the other false: thus,

All men are wise.

Some men are not wise.

Two universals differing in quality, are called CONTRARY PROPOSITIONS. Of these, both may be false, but they cannot both be true.

All men are wise.

No men are wise.

Two particular propositions differing in quality, are said to be SUBCONTRARY. Of these, both may be true, but they cannot both be false: thus,

Some men are wise.

Some men are not wise.

If propositions differing in quantity agree in quality, then

1. If the universal be true, the particular must be true; but not vice versa: thus,

All men are mortal.

Some men are mortal.

2. If the particular be false, the universal must be false; but not vice versa: thus,

All men have wings.

Some men have wings.

3. Sometimes both propositions are true, and sometimes both are false*.

* Duncan's Logic, book ii. ch. iii.

Watts's Logic, book ii. ch. ii. sect. i. iii.

SECTION IV.

Of Absolute and Modal, Simple, Compound, and Disjunctive Propositions.

THE THIRD division of propositions, is into ABSOLUTE and MODAL.

AN ABSOLUTE PROPOSITION asserts the actual connexion or coincidence of the subject and predicate, or the want of that connexion or coincidence ; as, Learning is useful ; No man is perfect.

A MODAL PROPOSITION affirms the manner of connexion between the subject and the predicate ; as, Men ought to be virtuous ; Truth must prevail.

Modal propositions may be reduced to absolute ones, by making the connexion of the two ideas the subject, and the mode the predicate of the proposition : thus, That men should be virtuous is morally obligatory ; The prevalence of truth is necessary.

HYPOTHETICAL PROPOSITIONS, are those in which the truth or falsehood of one proposition, called the antecedent, is made the condition of the truth or falsehood of another proposition,

proposition, called the consequent: thus, if God be good, the virtuous will be happy.

These indeed are not, properly speaking, propositions, but syllogisms, as will hereafter appear.

The **FOURTH** division of propositions is into **SIMPLE AND COMPOUND**.

A **SIMPLE PROPOSITION** has but one subject and one predicate; as, vice is dishonourable.

A **COMPOUND OR COPULATIVE PROPOSITION** has two or more subjects, or predicates, or both; as, learning and virtue are better than riches and power.

A compound proposition may be resolved into as many simple propositions as it contains subjects, or predicates, or both.

A **DISJUNCTIVE PROPOSITION** compares two or more predicates with the subject, but affirms, that one only belongs to it, without determining which; as, the earth either moves or is at rest; the three angles of a triangle are either greater or less than two right angles, or they are equal to two right angles.

A disjunctive proposition is properly a simple proposition, for though various predicates are compared with the subject, one *only*, exclusive
of

of all the rest, is affirmed to be connected with it*.

SECTION V.

Of Propositions True and False, Certain and Uncertain, Intuitive and Demonstrable.

THE FIFTH division of propositions is into TRUE, AND FALSE.

A TRUE PROPOSITION, unites ideas that agree, and separates those which disagree.

A FALSE PROPOSITION, affirms an agreement between ideas which disagree, and a disagreement between those which agree.

Of true propositions, some are CERTAIN and some are UNCERTAIN.

A CERTAIN PROPOSITION, is a proposition the truth of which is clearly perceived.

AN UNCERTAIN, OR DUBIOUS PROPOSITION, is a proposition the evidence of which is not perfectly satisfactory.

OF CERTAIN PROPOSITIONS, some are intuitive and some demonstrable.

AN INTUITIVE PROPOSITION, is one the truth of which is perceived immediately upon

* Duncan's Logic, book ii. sect. iv. v.

the comparison of the ideas ; as, The whole is equal to all its parts taken together.

A DEMONSTRABLE PROPOSITION, is a proposition which may be proved by a train of reasoning called demonstration ; as, The square of the hypotenuse, is equal to the squares of the sides, of a right-angled triangle.

DEMONSTRATION, is a succession of propositions, beginning with self-evident and advancing to remoter truths, in which every successive proposition is intuitively connected with the preceding, till in the end the conclusion becomes intuitive.

The most perfect specimen of the process of the mind in the acquisition of knowledge is found in MATHEMATICS.

Mathematicians begin with clear and accurate DEFINITIONS of their terms, to which they always rigidly adhere.

From definitions they advance to self-evident propositions, some of which are speculative, and are called AXIOMS ; others are practical, and are called POSTULATES.

They next proceed to the DEMONSTRATION of remoter truths, of which the speculative, are called THEOREMS, and the practical, PROBLEMS.

From

From easy and intuitive principles, they thus advance, by regular gradation, to more difficult and complex truths, till they at last arrive at conclusions the most remote from the first principles of science, and such as, to a person not conversant in these inquiries, would appear beyond the reach of the human intellect: such are many of the demonstrations in astronomy, and in other branches of natural philosophy.

COROLLARIES, are self-evident inferences from demonstrated truths. SCHOLIA, are observations which tend to illustrate a subject. LEMMAS, are preliminary propositions.

Mr. Locke thought, that, as moral ideas are equally capable of strict definition with mathematical ideas, demonstration is equally applicable to moral subjects*.

* Duncan's Logic, book ii. ch. vi.

Watts's Logic, part ii. ch. ii. sect. vii. viii.

Locke's Essay, book iv. ch. iv. sect. vi. vii.

be concerning the relation between virtue and honour, let utility be the third idea, and the syllogism will stand in this form :

Whatever is useful, is honourable.

Virtue, is useful,

Therefore, Virtue, is honourable.

Again, let the question be proposed concerning the relation between vice and happiness, and let odious be the third idea ; the syllogism will stand thus :

Nothing odious is happy.

Vice is odious,

Therefore, Vice is not happy.

Propositions capable of being proved by syllogistic reasoning, are chiefly, if not solely, those which express coincidences, or the want of them. Such are all propositions relating to quantity and number ; and particularly the doctrine of proportions. Propositions which relate to concurrences are proved by consciousness, sense, or testimony. Such are the facts in experimental philosophy, chemistry, and history.

Logicians have invented various rules for the construction of syllogisms, so as to produce true and legitimate conclusions ; these they have thrown into a mathematical form :
they

they are chiefly valuable as curious specimens of logical ingenuity; but they may also be of some use to assist the mind in analysing a process of reasoning, and thus detecting sophistry, and establishing truth*.

SECTION II.

*The General and Special Rules of Syllogism
demonstrated from their First Principles.*

DEFINITIONS.

DEF. I.

A SYLLOGISM, is the expression of an act of reasoning, in which a proposition affirming the agreement or disagreement of two ideas, is inferred from two preceding propositions, in which those ideas are compared with some third idea.

DEF. II.

The proposition containing the inference is called, the CONCLUSION; the two preceding propositions are, the PREMISES.

* Duncan's Logic, book iii. ch. i.

LOGIC. PART III.

DEF. III.

The ideas compared in the premises and the conclusion, are in general called **TERMS**.

DEF. IV.

Both the terms of the conclusion are called **EXTREMES**; and the idea with which they are compared is, the **MIDDLE TERM**.

DEF. V.

The subject of the conclusion is called, the **LESS**, and the predicate of it is, the **GREATER EXTREME, OR TERM**.

DEF. VI.

That of the two premises in which the greater extreme is compared with the middle term is, the **MAJOR PROPOSITION**; that in which the less extreme is compared with it is called, the **MINOR PROPOSITION**; and sometimes, the **ASSUMPTION***.

DEF.

* In the following syllogism :

Truth is venerable :

Christianity is truth ;

Therefore, Christianity is venerable.

Christianity, Venerable, and Truth, are the terms of the syllogism. Christianity and Venerable, are the extremes, and Truth the middle term. Venerable, is the major, and Christianity, the minor extreme. Truth is venerable,

DEF. VII.

A proposition is said to be **UNIVERSAL**, when its subject is taken universally, and **PARTICULAR**, when its subject is taken particularly*.

DEF. VIII.

AN AFFIRMATIVE PROPOSITION, is a proposition in which two ideas are asserted to agree. **A NEGATIVE PROPOSITION**, is one in which they are asserted to disagree.

AXIOMS.

AX. I.

Particular ideas, and propositions, are contained in universals, but not vice versa.

AX. II.

In affirmative propositions, the predicate is venerable, Christianity is Truth, are the premises. Therefore Christianity is venerable, is the conclusion. Truth is venerable, is the major proposition. Christianity is Truth, is the minor proposition, or the assumption.

* In an universal proposition the predicate extends to the whole subject, whether it be a particular or universal idea; in a particular proposition the predicate is limited to a part of the subject.

taken particularly, in negative propositions, universally*.

AX. III.

If two ideas agree with a third, they agree with each other.

AX. IV.

The agreement of two ideas with a third, cannot prove their disagreement with each other.

AX. V.

If, two ideas being compared with a third, one agrees, and the other disagrees, they disagree with each other.

AX. VI.

If one agrees, and the other disagrees, it cannot be inferred that they agree with each other.

AX. VII.

Nothing can be inferred concerning the agreement, or disagreement of ideas with each other, by comparing them with two different

* The predicate in an affirmative proposition being taken in its comprehension only; that of a negative proposition in its extension. Hence the difficulty of proving a negative proposition, and the reasonableness of generally imposing the onus probandi upon the affirmative side of the question.

ideas with which they may be found respectively to agree.

AX. VIII.

Neither can any thing be inferred, concerning their mutual agreement or disagreement, by comparing them with one and the same idea, with which they both disagree.

GENERAL RULES OF SYLLOGISM.

G. RULE I.

If the middle term be not taken once, at least, universally, nothing can be inferred.

DEM.

1. The middle term being taken twice particularly may signify two different ideas*.

gr. 1. Ax. 7. 2. No conclusion can be drawn. Q. E. D.

* Thus, from the premises, Some men are learned, Some men are unlearned, it cannot be inferred that they who are unlearned are learned, because the middle term "men" in both the premises, being restricted by the form of the proposition to a particular class under the general idea, is evidently taken in different senses in the two premises.

G. RULE II.

A term cannot be taken more universally in the conclusion, than in the premises.

DEM.

1. To take a term particularly in the premises, and universally in the conclusion, would be to suppose an universal contained in a particular.

gr. 1. Ax. 1. 2. This conclusion is absurd. Q. E. D.

G. RULE III.

If the major proposition of a syllogism be a particular affirmative, the conclusion cannot be negative.

DEM.

1. The major term must be either the subject or the predicate of the major proposition.

Hyp. Def. 7.

2. If it be the subject, it is particularly taken as being a particular proposition.

Hyp.

Hyp. Ax. 2.

3. If it be the predicate, it is particularly taken as being an affirmative proposition.

gr. 1. 2. 3.

4. The major term is particularly taken in the premises.

gr. 4. G. R. 2.

5. It must be particularly taken in the conclusion : that is, the predicate of the conclusion must be taken particularly.

Ax. 2.

6. The predicate of a negative proposition must be taken universally.

gr. 5. 6.

7. Therefore the conclusion cannot be negative.

Q. E. D.

G. RULE IV.

A negative conclusion cannot be drawn from two affirmative premises.

DEM.

Def. 8.

1. This would be to infer the disagreement of two ideas from their agreement

agreement with a third.

- gr. 1. Ax. 4. 2. This inference is absurd.
Q. E. D.

G. RULE V.

From two negative premises nothing can be concluded.

DEM.

- Def. 8 1. These premises only show,
the disagreement of
both extremes with
the middle term.

- gr. 1. Ax. 8. 2. No inference can be
drawn. Q. E. D.

G. RULE VI.

If one of the premises be negative, the conclusion must be negative.

DEM.

- Ax. 5. 1. In this case a negative
conclusion may justly
be drawn.

- Ax. 6. 2. An affirmative conclusion
cannot be drawn.

- gr. 1. 2. 3. The conclusion must be
negative. Q. E. D.

G. RULE

G. RULE VII.

From two particular premises nothing can be concluded.

LEMMA.

Only three cases of this can happen. Of these two particular premises both may be negative, or both affirmative; or one may be negative, and the other affirmative.

CASE I.

Is excluded by G. Rule V.

CASE II.

If both be particular and both affirmative, nothing can follow.

DEM.

Def. 7.

1. Both the subjects must be particularly taken because they are particular propositions.

Ax. 2.

2. Both the predicates must be particularly taken because they are both affirmative.

gr. 1. 2.

3. The middle term must be taken twice particularly.

gr. 3.

gr. 3. G. R. 1. 4. No conclusion can be drawn. Q. E. D.

CASE III.

If both the premises be negative, and both particular, no conclusion can be drawn.

DEM.

Hyp. G. R. 6. 1. The conclusion is negative.

gr. 1. Ax. 2. 2. The major term is universally taken, in the conclusion.

gr. 2. G. R. 2. 3. It is taken universally in the major proposition.

Hyp. Def. 7. 4. The subject of both premises is particular.

Hyp. Ax. 2. 5. The predicate of one of the premises is particular.

gr. 3. 4. 5. 6. Of the four terms, none but the greater extreme is universally taken.

gr. 6. 7. The middle term is taken twice particularly.

gr. 7. G. R. 1. 8. There can be no conclusion. Q. E. D.

From

From comparing the first, second, and third cases with the lemma, the rule follows universally.

G. RULE VIII.

If either of the premises be particular, the conclusion cannot be universal.

LEMMA.

Only three cases can happen. Both the premises may be negative; or both affirmative; or one may be negative, and the other affirmative.

CASE I.

Is excluded by G. Rule V.

CASE II.

If both the premises be affirmative, and one particular, the conclusion cannot be universal.

DEM.

Hyp. Ax. 2.

1. The predicates of both are taken particularly, because they are both affirmative.

Def. 7.

2. The subject of one is taken particularly, one being a particular proposition.

gr. I. 2.

gr. 1. 2.

3. Three terms being taken particularly, only one can be taken universally,

G. R. 1.

4. The middle term must be taken universally, if there be any conclusion at all.

gr. 3. 4.

5. Both the extremes must be taken particularly in the premises.

gr. 5.

6. The less extreme being taken particularly in the premises, must be taken particularly in the conclusion.

Def. 5. gr. 6.

7. The conclusion must be particular. Q. E. D.

CASE III.

If one of the premises be negative, and one affirmative, one being also particular, the conclusion must be particular.

DEM.

Hyp. Ax. 2.

1. One of the premises being affirmative, the predicate

predicate of it must be taken particularly.

Def. 7.

2. One of the premises being particular, the subject of it must be taken particularly.

gr. 1. 2.

3. Only two terms can be taken universally.

gr. 3 G. R. 1.

4. One of these two is the middle term.

Hyp. G. R. 6.

5. One of the premises being negative, the conclusion must be negative.

Def. 5. Ax. 2.

6. The major term being the predicate of the conclusion will be universally taken in it.

G. R. 2.

7. The major term must be universally taken in the premises, that is, in the major proposition.

gr. 4. 7.

8. Since the middle and the major terms are both taken universally, and no more than these can be so taken in this case;

case ; the minor term must be particularly taken in the premises.

gr. 8. G. R. 2. 9. The minor term must be particularly taken in the conclusion.

gr. 9. Def. 5. 10. The minor term being the subject of the conclusion, the conclusion, in the case supposed, must be a particular proposition. Q. E. D.

Thus, by comparing the three cases with the lemma, the rule is universally established.

SCHOLIUM.

By these rules we account for all the various combinations of propositions, whether universal or particular, negative or affirmative, which can possibly be admitted into any sort of syllogism.

These four distinctions are represented by the letters A, E, I, and O, of which A, signifies universal affirmative ; E, universal negative ; I, particular affirmative ; and O, particular negative. And as only three of these can concur in a syllogism, all the pos-

sible combinations of them are 64, as will appear by the Table that is subjoined. Of these 53 are excluded by the general rules referred to over against them; one is superseded, and the other ten are admitted, as will appear by what follows, when we come to treat of the figures and moods of syllogisms.

The figures annexed in the Table to those which are neither admitted, nor superseded, denote the general rule by which they are excluded.

TABLE.

AAA—ad.	EAA—6	IAA } 8	OAA } 8
AAE—4	EAE—ad.	IAE } 8	OAE } 8
AAI—ad.	EAI—6	IAI—ad.	OAI—6
AAO—4	EAO—ad.	IAO—4	OAO—ad.
AEA—6	EBA } 5	IEA—6	OEA } 5
EEA—ad.	EEE } 5	IEE—8	OEE } 5
EAI—6	EBI } 5	IEI—6	OEI } 5
EAO—sup.	EBO } 5	IEO—3	OEO } 5
AIA—8	EIA } 8	IIA } 7	OIA } 7
AIE—4	EIE } 8	IIE } 7	OIE } 7
AII—ad.	EII—6	III } 7	OII } 7
AIO—4	EIO—ad.	IIO } 7	OIO } 7
AOA—6	EOA } 5	IOA } 7	OOA } 7 and 5
AOE—8	EOE } 5	IOE } 7	OOE } 7 and 5
AOI—6	EOI } 5	IOI } 7	OOI } 7 and 5
AOO—ad.	EOO } 5	IOO } 7	OOO } 7 and 5

COR.

It appears from hence that ten combinations may be admitted, viz.

AAA	EAE	IAI	OAO
AAI	EAO		
AEE	EIO		
AII			
AOO			

AEO, is superseded in AEE: and why AAI, and EAO, are not superseded by AAA, and EAE, will be shown under a following head.

DEF. IX.

The different combinations of propositions in syllogisms, according as the three propositions of which they consist are either universal or particular, negative or affirmative, are called MOODS.

COR.

There are but ten possible moods of syllogisms, excepting those which are superseded as above.

AX. IX.

There are four different positions of the middle term in the premises. 1. It may be the subject of the major, and the predicate of the

the minor. 2. It may be the predicate of both; or, 3. It may be the subject of both; or, 4. It may be the predicate of the major, and the subject of the minor.

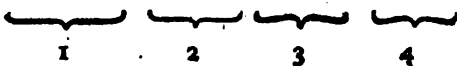
DEF. 10.

Syllogisms are said to be of different FIGURES, according to the different position of the middle term in the premises.

SCHOL. 1.

Syllogisms are said to be of the first, second, third, or fourth figure, according to the position of the middle term in the order in which they are placed in the ninth axiom. The definitions are comprehended in the following technical line.

SUBJECT PREM : DIS PREM : DIS SUB : PREM SUB : dato quarto.



SCHOL. 2.

From this definition of the figures, several moods which might be admitted in some figures will be excluded from others, by certain special rules of syllogism, which it will next be our business to enumerate and demonstrate.

SPECIAL RULES OF SYLLOGISM.

SP. RULE 1.

In the first figure *SUB PRÆ*, the Minor must be affirmative.

DEM.

- | | |
|-------------|--|
| G. R. 6. | 1. If the minor were negative, the conclusion must be negative. |
| G. R. 5. | 2. If the minor were negative, the major must be affirmative. |
| 1. Ax. 2. | 3. On this supposition, the major term must be taken particularly in the major proposition; because by hypothesis it is the predicate of that proposition. |
| 1. Ax. 2. | 4. On this supposition, the major term must be taken universally in the conclusion. |
| G. R. 3, 4. | 5. The major term would be taken more universally in the conclusion, than in the premises. |

Q. E. A.

SP. RULE

SP. RULE II.

In the first figure the Major must be universal.

DEM.

S. R. 1. The minor must be affirmative.

1. Ax. 2. The middle term, being by hypothesis the predicate of the minor, is taken particularly.

Def. 7. 3. If the major were particular, the middle term being by hypothesis the subject, must be particular.

gr. 2. 3. 4. On this supposition, the middle term would be taken twice particularly; which is absurd.

gr. 4. G. R. 1. 5. Therefore the major is universal. Q. E. D.

SP. RULE III.

In the second figure BIS PRÆ, one of the Premises is negative.

DEM.

Hyp. Ax. 2. 1. If both the premises were

e 2

were affirmative, since the middle term is the predicate of both, it would be taken twice particularly.

2. Therefore one of the premises must be negative. Q. E. D.

SP. RULE IV.

In the second figure, the Major must be universal.

DEM.

- | | |
|-----------------|--|
| S. R. 3. Hyp. | 1. One of the premises in this figure being negative, the conclusion must be negative. |
| G. R. 6. | 2. The greater extreme, that is, the predicate of the conclusion, must be taken universally. |
| gr. 2. G. R. 2. | 3. The greater extreme must be taken universally in the premises. |
| Hyp. | 4. The greater extreme is the subject of the major proposition. |

gr. 3. 4. G. R. 2. 5. The major proposition in the second figure must be universal. Q. E. D.

SP. RULE V.

In the third figure BIS SUB, the Minor proposition is affirmative.

DEM.

G. R. 5. 1. If the minor be negative, the major must be affirmative.

Hyp. Ax. 7. 2. Since the major term is by hypothesis the predicate of the major proposition, it must in this case be taken particularly.

gr. 1. G. R. 6. 3. The conclusion must upon this construction be negative.

gr. 3. Ax. 2. 4. The major term must be taken universally in the conclusion.

gr. 3. 4. 5. The major term must be taken more universally in the conclusion than in the premises, if the minor be negative.

- G. R. 2. 6. In the third figure, The
minor proposition must
be affirmative. Q. E. D.

SP. RULE VI.

In the third figure, the Conclusion will be particular.

DEM.

- Ax. 2. S. R. 5. 1. In this figure the minor
proposition is affirma-
tive, and therefore the
minor term being the
predicate, must be ta-
ken particularly in the
premises.

- gr. 1. G. R. 2. 2. The minor term will be
particular in the con-
clusion.

- gr. 2. Def. 7. 3. The subject of the con-
clusion is taken par-
ticularly, therefore the
conclusion is a particu-
lar proposition. Q. E. D.

SP. RULE VII.

In the fourth figure PRÆ SUB, if the Major
proposition be affirmative, the Minor is uni-
versal.

Q. E. D.

E 7

DEM.

DEM.

Hyp. Ax. 2. 1. If the major be affirmative, the middle term being its predicate, must be taken particularly.

Hyp. Def. 7. 2. If the minor proposition were particular, the middle term would be particularly taken in it.

G. R. 1. 3. The middle term would be taken twice particularly, which is absurd; and therefore in this figure the minor must be universal.

Q. E. D.

SP. RULE VIII.

In the fourth figure, if the Conclusion be negative, the Major is universal.

DEM.

Def. 5. 1. If the conclusion be negative, the major term is taken universally in it.

G. R. 2. 2. The major term must be taken

- taken universally in
 the major proposition.
 Hyp. 3. The major term in the
 fourth figure is the
 subject of the major
 proposition.
 Def. 7. 4. The major proposition
 must be universal.
 Q. E. D.

SP. RULE IX.

In the fourth figure, if the Minor be affirmative, the Conclusion is particular.

DEM.

- Hyp. Def. 6, 1. In this figure the minor
 term is the predicate of
 the minor proposition.
 Ax. 2. 2. The minor proposition
 being affirmative, the
 minor term is taken
 particularly in it.
 G. R. 2. 3. The minor term must be
 taken particularly in
 the conclusion.
 Def. 5, gr. 3. 4. The conclusion is, in
 this case, a particular
 proposition. Q. E. D.

SCHOLIUM

SCHOLIUM 1.

By these Special Rules for the different Figures, it will appear, that several of the moods not universally excluded by the General Rules of Syllogism, are excluded from several of these Figures, as may be seen in the following Table, where those moods which are admitted under each Figure are signified by the technical terms by which they are known; and those which are excluded are marked with a reference to the Rule by which they are excluded:

TABLE.

	Fig. 1.	Fig. 2.	Fig. 3.	Fig. 4.
AAA	Barbara.	3.	6.	9.
AAI	Sup. in AAA	3.	Darapti.	Bamarip.
AEE	1.	Camestres.	6.	Cameres
AII	Darii.	3.	Datifi.	7.
AOO	1.	Baroco.	5.	7.
EAE	Celarent.	Cesare.	6.	9.
EAO	Sup. in EAE	Sup. in EAE	Felapton.	Festapo.
IAI	2.	3.	Difamis.	Dimatis.
PAO	2.	4.	Bocardo.	8.
EIO	Ferio.	Festino.	Ferison.	Frefison.

SCHOLIUM 2.

It is to be observed that AEO in the second and fourth Figure is included in AEE: but from the

the first and third it is excluded by Special Rule II and V: and therefore upon the whole it is said to be superseded; which is not the case with AII, nor EAO, they having a place in the third and fourth Figures, from which their universals AAA and EAE are excluded.

SCHOLIUM 3.

The following technical lines have been invented for remembering the moods under each figure.

BARBARA, CELARENT, DARII, FERIO, quoque prima
CESARE, CAMESTRES, FESTINO, BAROCO, secundæ,
Tertia DARAPTI sibi vindicat atque FELAPTON,
Adjungens DISAMIS, DATISI, BOCARDO, FERISON.
NonBAMARIP, CAMERES, DIMATIS, FESTAPO, FRESISON.

Which last line intimates that the fourth figure is hardly worth regarding, being indeed no more than an awkward transposition of the first.

SCHOLIUM 4.

Propositions of all kinds, whether universal or particular, affirmative or negative, which are capable of being proved by syllogisms, are reducible to syllogisms of the first figure; the other figures therefore are comparatively of little use. It may nevertheless be proper to illustrate them by a few examples. In all syllogisms

logisms regularly constructed, the major proposition is placed first, the minor second, and the conclusion last.

FIG. 1.

Bar- All natural evils terminate in good:

ba- All wars are natural evils:

ra. Therefore, All wars terminate in good.

Ce- No well directed efforts to benefit mankind shall ultimately be lost.

la- All seasonable instructions are well-directed efforts.

rent. Therefore, No seasonable instructions shall be lost.

Da- All good men love peace:

ri- Some statesmen are good men:

i. Therefore, Some statesmen love peace.

Fe- No bigots are to be trusted with power:

ri- Some honest men are bigots:

o. Therefore, Some honest men are not to be trusted with power.

FIG. 2.

Ce- No restraint upon fair discussion, is beneficial to society.

fa- All restraints upon injustice, are beneficial to society.

re.

re. Therefore, No restraints upon injustice
are restraints upon fair discussion.

FIG 3. Bis sub.

Da- All wise men, love just government.

rap- All wise men, love temperate liberty.

ti. Therefore, Some who love temperate
liberty, love just government.

SECTION III.

Compound and Imperfect Syllogisms.

I. HYPOTHETICAL SYLLOGISMS, are
those in which the major premise is a hypo-
thetical proposition.

If God be wise, and good, the virtuous
shall be happy.

But God is wise, and good.

Therefore, the virtuous shall be happy.

Of Hypothetical Syllogisms there are four
MOODS, of which two are admissible, and two,
inadmissible.

The admissible moods are, the MODUS PO-
NENS, and the MODUS TOLLENS.

I. The MODUS PONENS, in the Minor
premise admits the antecedent, and in the
Conclusion admits the consequent.

If

If the christian history be credible, the doctrine must be true :

But the christian history is credible ;

Therefore, the christian doctrine must be true.

2. The **MODUS TOLLENS**, rejects the consequent in the Minor proposition, and in the Conclusion rejects the antecedent.

If men were just, slavery would be abolished :

But slavery is not abolished :

Therefore men are not just.

No other Mood can be admitted; for we cannot argue from the removal of the antecedent to the removal of the consequent, nor from the establishment of the consequent to the establishment of the antecedent.

II. **EPICHIREMA** contains the proof of the Major or the Minor, or both, before it draws the Conclusion. For example,

Unbelievers pay little attention to the evidence of christianity.

This appears, from the contempt in which they hold the subject; from their misconceptions of the nature of the christian religion; from the futility of their objections; and from their misstatement of facts.

But

But, Many philosophers are unbelievers :

Therefore many philosophers pay little attention to the evidences of christianity.

III. ENTHYME, is an imperfect Syllogism, in which only one of the premises and the conclusion are expressed. Thus,

All sciences are useful :

Therefore, mathematics are useful.

This is the Syllogism most in use: the rapidity with which the mind compares its ideas, and draws its conclusion, superseding the necessity of formal syllogism, excepting where it may be necessary to analyse an argument, in order to expose its weakness, or to establish its validity.

IV. SORITES is a Syllogism which consists of a series of propositions, in which the predicate of the first becomes the subject of the second, and so on, till in the conclusion the subject of the first is joined with the predicate of the last. For example,

All who love wisdom, will earnestly desire it.

All who earnestly desire wisdom, will use the necessary means to attain it:

All who use the means of acquiring wisdom, will encounter many difficulties.

AN

All who encounter difficulties, must exercise patience, perseverance, and self-denial.

Therefore all who love wisdom, must exercise patience, perseverance, and self-denial*.

V. PROSYLLOGISMUS, unites two or more syllogisms together, so that the conclusion of the former shall be the major or the minor of the latter. For example,

Science is an ornament to the mind :

Philosophy is science :

Therefore philosophy is an ornament to the mind.

But ethics is a branch of philosophy :

Therefore the knowledge of ethics is an ornament to the mind.

DILEMMA, is a Hypothetical Syllogism of the modus tollens, in which the consequent of the major is a disjunctive proposition, containing every supposition upon which the antecedent may be supported. The minor removes the antecedent : and the conclusion removes the consequent. For example,

If St. Paul's account of his conversion be not true, he was either deceived, or a deceiver.

But he could not be deceived himself; and

* For another instance of the Sorites, see Rom. viii. 29, 30.

it is morally impossible that he should have been a deceiver.

Therefore it is absurd to affirm, that St. Paul's account of his conversion, is not true ; or in other words, therefore the Apostle's narration is true.

This mode of reasoning is frequently used in mathematical demonstration. Thus,

If circles be not to each other as the squares of their diameters, they are in a ratio either greater or less than the squares of their diameters.

But they are not in a ratio either greater or less than this :

Therefore circles are to each other as the squares of their diameters.

If the consequent of the major consists of three suppositions, the syllogism is called a TRILEMMA. For instance,

If the universe be not perfect, the defect must be owing either to the want of goodness, of wisdom, or of power, in the Creator.

But there is no want of goodness, of wisdom, or of power, in the Creator.

Therefore the universe is perfect.

VII. INDUCTION, is the distribution of a general idea into its several species and individuals, and ascribing to the whole what is found to be the property of every part. Thus,

The eternity of future torments is not to be found in the pentateuch, in the historical books, in the poetical compositions, nor in the prophets, of the Old Testament. Neither is it to be found in the gospels, the acts, the epistles, nor the apocalypse.

Therefore, the doctrine of the eternity of future torments is not to be found in the Scriptures, either of the Old Testament or the New.

INDUCTION, is the kind of proof, upon which the principal stress is laid in experimental philosophy. Experiments are facts, the comparison of which leads to the knowledge of the previous circumstances by which they are produced, or modified. Thus philosophers acquire an insight into the causes of existing phenomena, and the laws by which the universe is regulated. This process of inquiry is slow, but it is the only sure method of becoming acquainted with the powers of nature: and it is to the prosecution of this mode of investigation, that the moderns owe their great superiority over the ancients in physical science.

When Induction is complete, the evidence is satisfactory ; but as this can seldom be attained, philosophers are constrained to have recourse to arguments from Analogy.

VIII. ANALOGY, argues from proportionable causes to proportionable effects, and from similarity of circumstances to similarity of consequences. For example,

All matter which falls under our observation gravitates.

Therefore, Gravitation is universally a property of matter.

Statesmen have ever governed their conduct by views of interest and ambition.

Therefore, they will always govern themselves by the same principles.

The argument from Analogy is sometimes almost equal in force to a complete Induction ; at other times it hardly amounts to a faint probability. This depends upon the degree of resemblance between the circumstances which precede, or accompany existing phenomena, and those which constitute the analogy in any given case. For it is an established principle of reasoning, that the same causes operating in the same circumstances will
invariably

Invariably produce the same effects; and therefore similar causes will produce similar effects; and proportionable causes proportionable effects. Thus, that the planets are inhabited is a fact, which, though supported only by analogy, is as firmly credited by philosophers, as that the earth itself is inhabited, which we know by observation and experience. But that the inhabitants of the planets are similar in their form, and constitution, of body and mind, to the inhabitants of this world, is a conclusion, which, though favoured by some phenomena, is by much too dubious to be admitted without great hesitation. It may be further observed, that arguments from analogy are in no case more fallacious than where they lead to conclusions concerning the conduct of voluntary agents. Not that men with the same views and feelings will act differently in circumstances precisely similar, for that is impossible; but, because it is extremely difficult for one person to enter into the views and feelings of another, and consequently, to foresee in given circumstances how another man will act. Nevertheless there are cases in which the conduct of voluntary agents may be predicted with a precision

nearly approximating to that with which we foretell the effects of physical causes. For example, it is as certain that a dishonest and avaricious man will take an undue advantage in business where opportunity offers, as that fire will burn, or water run down hill*.

SECTION IV.

Topics.—Different Kinds of Argument.

I. THE middle term is often called the ARGUMENT.

TOPICS or COMMON PLACES, are general subjects from whence arguments are drawn ; such as history, philosophy, morals, theology, and the like.

The PROOF of any proposition, is a syllogism, or series of syllogisms, collecting that proposition from known and evident truths.

If the syllogisms of which the proof consists, admit of no premises but definitions, intuitive truths, and propositions already established ; the argument so constructed is called a demonstration. Such are all the arguments in mathematics.

* Watts's Logic, part iii. ch. ii. sect. 6.

Duncan's Logic, book iii. ch. iv.

II. DEMONSTRATIONS are of two kinds, A PRIORI, and A POSTERIORI.

DEMONSTRATION A PRIORI, argues from the cause to the effect. Thus, God is infinite in power, wisdom, and benevolence : Therefore, the universe which he has made, is unlimited in extent, duration, and felicity.

DEMONSTRATION A POSTERIORI, argues from the effect to the cause. Thus, The universe abounds in marks of excellent contrivance, and benevolent design : Therefore, there is an intelligent, and benevolent, First Cause of All.

III. Arguments are either DIRECT, or INDIRECT.

A DIRECT ARGUMENT, is that which immediately proves the proposition in question.

An INDIRECT ARGUMENT proves the conclusion, by proving or disproving some proposition upon which the conclusion depends.

Of indirect arguments there are three cases.

1. REDUCTIO AD ABSURDUM, proves the conclusion, by demonstrating the absurdity of the contradictory proposition. This is often used in mathematics.

2. ARGUMENTUM A FORTIORI, proves the

the conclusion by proving a less probable proposition upon which the conclusion depends. This mode of reasoning is also much used by mathematicians.

3. ARGUMENTUM EX CONCESSO, proves the conclusion by proving a proposition upon which it was agreed to yield the original question.

IV. Various other arguments are distinguished by Latin names.

1. ARGUMENTUM AD JUDICIUM, an address to the understanding; an argument founded upon rational principles.

2. ARGUMENTUM AD FIDEM, an argument founded upon testimony either human or divine.

3. ARGUMENTUM AD IGNORANTIAM, an argument founded on insufficient principles which the opponent has not skill to refute.

4. ARGUMENTUM AD HOMINEM, an address to a man's professed principles, whether true or false.

5. ARGUMENTUM AD VERECUNDIAM, an argument drawn from authority we are ashamed to dispute.

6. ARGU-

6. ARGUMENTUM AD PASSIONES, an address to the passions of the hearers*.

SECTION V.

Doctrine of Sophisms.

FALSE syllogisms are called PARALOGISMS.

A false syllogism, the fallacy of which is not obviously apparent, is a SOPHISM.

The principal kinds of SOPHISMS are the following.

1. IGNORATIO ELENCHI, or a MISTAKE OF THE QUESTION, when a proposition is proved which has no necessary connexion with the point in dispute: Thus, for example, If a man meaning to establish the divine fore-knowledge of contingent events sets himself to prove that the knowledge of God is infinite, he mistakes the question in dispute: For it may be conceded by his opponent, that God is omniscient, but it may still remain a question, whether future contingencies are the objects of knowledge.

* Duncan's Logic, book iii. ch. v.

Watts's Logic, part iii. ch. ii. sect. vii. xiii.

In like manner, unbelievers argue that christianity is not of divine original, because the doctrine of eternal torments is incredible. This is also an *ignoratio elenchi*: a corruption of christianity is mistaken for christianity itself.

2. *PETITIO PRINCIPII*, BEGGING THE QUESTION, or taking for granted the proposition to be proved.

If, for example, a zealot should argue that a doctrine which he stigmatises as heresy is unscriptural and untrue, because it is contrary to the declarations of Christ, and the apostles, he begs the question, and assumes the principle which he professes to prove. This is sometimes called, arguing *idem per idem*.

3. *ARGUING IN A CIRCLE*, is when the premises are proved by the conclusion, and the conclusion by the premises.

Thus the papists argue, that the authority of the church proves the truth of the scriptures; and the authority of the scriptures establishes the infallibility of the church.

4. *NON CAUSA PRO CAUSA*, the ascription of a false cause. As when a person ascribes events to good or bad luck, to the influence of the planets, and the like.

5. *FALLACIA*

5. FALLACIA ACCIDENTIS, arguing from what is accidental, to what is essential. So the papists argue, that the scriptures are not to be read by the common people, because they may be dangerously misinterpreted. In the same way, it is argued, that certain amusements are universally unlawful, because they are sometimes carried to excess.

6. Sophisms of EQUIVOCATION are those in which the argument depends upon the ambiguity of the terms. Of this the following is an old example.

He that says, You are an animal, says true,

He that says, You are a goose, says, you are an animal,

Therefore he that says, You are a goose, says true.

Other sophisms are mentioned by logicians which it is not necessary to specify. Good sense, and a habit of reasoning justly upon all occasions, will enable a person to detect the fallacy of plausible sophistry, far better than any mechanical rules*.

* Locke's Essay, vol. ii. book iv. ch. xvii.

Watts's Logic, part iii. ch. iii.

PART THE FOURTH,

DISPOSITION AND METHOD.

DISPOSITION, is arranging ideas in such a manner as may best facilitate the acquisition, the recollection, the improvement, or the communication of knowledge.

METHOD is the effect of Disposition ; it is the actual arrangement of ideas in the mind.

Method is of two kinds : the **ANALYTIC**, and the **SYNTHETIC**.

ANALYTIC METHOD, resolves a complex idea into its component principles.

SYNTHETIC METHOD, begins with simple and self-evident principles, and advances gradually to remote, and complex propositions.

He that learns the structure of any machine, for instance, a watch, by taking it to pieces, acquires his knowledge by the Analytic Method : he that attains the same information

mation by seeing the artist combine the several parts, so as to form a complete whole, is instructed synthetically. In the same manner, he who begins with ancient history, and reads forward in regular order to the history of modern times, studies history synthetically: he pursues causes to their effects, and principles to consequences. But he, who beginning with modern history, reads in retrograde order to the accounts of ancient times, studies history analytically, and traces effects back to their remote causes.

The Analytic Method is best adapted to invention, and improvement, and the Synthetic, to the communication of science.

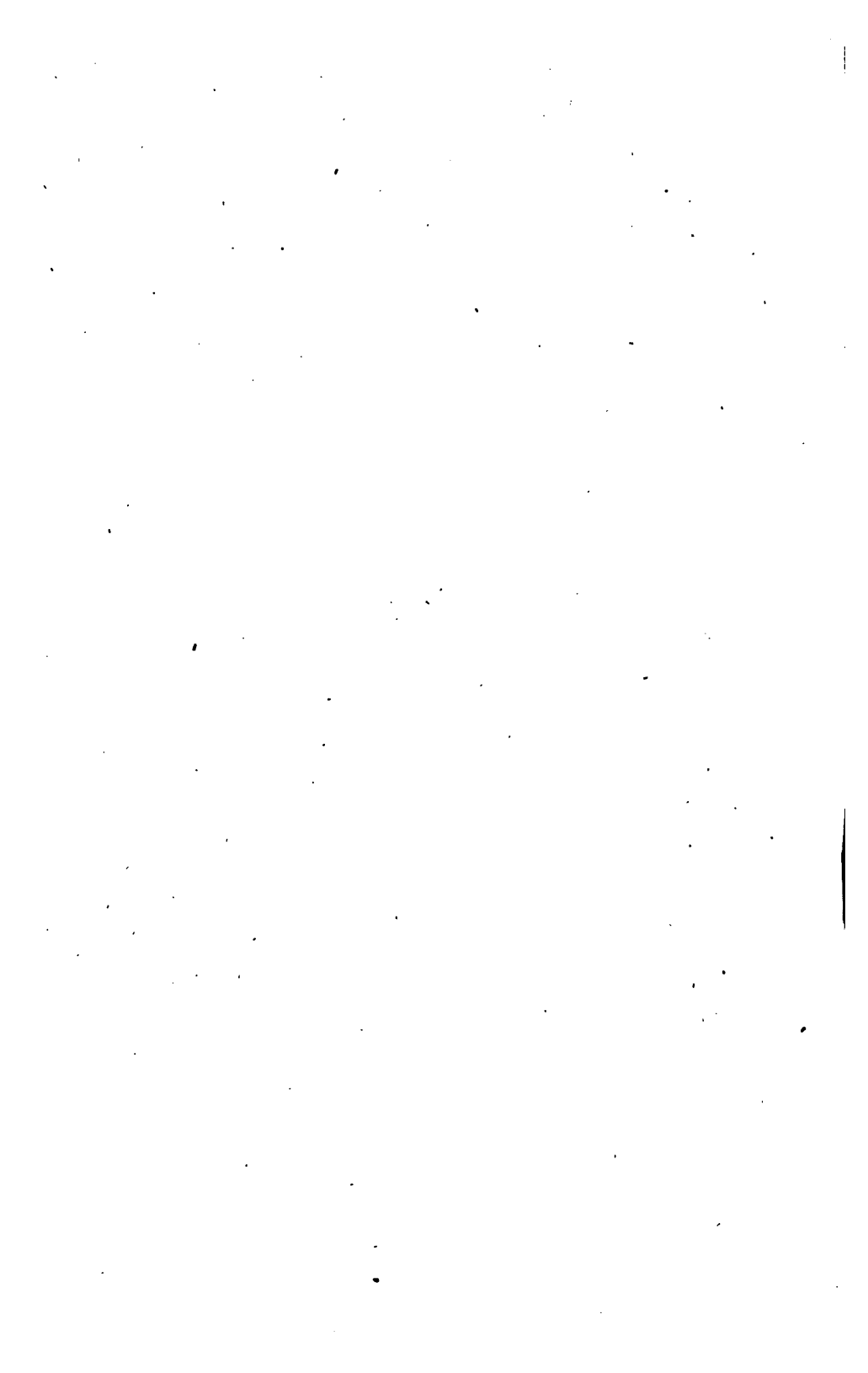
The Science of Geometry exhibits the most perfect specimen of the Synthetic method, and experimental philosophy and algebra of the Analytic. Nature presents complex appearances only: it is the province of philosophy to resolve those phenomena into their principles, and to trace them to their primary causes.

Analysis, and Synthesis, are sometimes used promiscuously, both in the discovery and the communication of knowledge. Arithmetic, and Algebra, are taught synthetically: but
when

when acquired, are applied analytically to the solution of complex problems, both in numbers, and quantity. In teaching any science, as for example, natural or moral philosophy, the whole is resolved by analysis into its larger divisions, and then again into less, till it is reduced to principles easily comprehended by the learner, who then acquires the knowledge of the science in the synthetic method.

A good method is of the highest importance, both for the acquisition, the recollection, and the communication of knowledge. Without method, ideas lie in confusion in the mind, and are of little use to the possessor, or to others. But by lucid arrangement, new ideas easily find their proper places, and knowledge is readily recollected upon proper occasions, and in its proper connexion. In the former case, the mind resembles a library, in which the books are thrown together without any order, so that, however numerous or well chosen they may be, they are never to be found at the time when they are wanted. In the latter, the memory resembles a library richly stored, in which every volume is in its proper place, and can be found readily upon every occasion. Education constitutes

stitutes the chief distinction amongst men in this respect. They who have studied regularly and systematically, beginning with first principles, and advancing gradually to complex and remote truths, will form a habit of thinking closely and connectedly upon all subjects, and of digesting their ideas into a regular and useful method. While others who have read and thought in a careless and desultory manner, without order or connexion, though their abilities may be of a superior cast, though the stock of their ideas may be very considerable, and though they may occasionally appear to advantage in general conversation, yet their opinions and habits of thinking will commonly be destitute of consistency. They can seldom attain to any great elevation of thought, or comprehension of mind; and are rarely qualified in an eminent degree to extend the limits of science, or to promote the intellectual and moral improvement of mankind.



ELEMENTS

OF THE

PHILOSOPHY

OF THE

HUMAN MIND.

E cœlo descendit, ΓΝΩΘΙ ΣΕΑΥΤΟΝ.

JUVENAL.

PHILOSOPHY

OF

THE HUMAN MIND.

INTRODUCTION.

SECTION I.

Nature and Use of the Philosophy of Mind.

PHILOSOPHY is the investigation of the laws of nature, by an accurate observation of select phenomena, and the application of principles so discovered to the solution of other natural appearances.

The province of **NATURAL PHILOSOPHY**, is to investigate the laws, and to resolve the phenomena, of the material universe.

The **PHILOSOPHY OF MIND**, investigates the laws, and explains the phenomena, of the intellectual world.

B

Knowledge,

Knowledge, says lord Bacon, is power. NATURAL PHILOSOPHY opens, enlarges, and strengthens the mind ; it teaches men to apply the powers of nature to the greatest advantage, for the improvement of the arts, and for the convenience, embellishment, and comfort of human life.

The PHILOSOPHY OF THE HUMAN MIND teaches man to know himself, and to improve, direct, and exert his intellectual faculties in a manner the most beneficial to himself and others.

In particular, it impresses a just sense of the dignity of our rational nature, and the great end of intellectual existence ; it directs to the best method of cultivating the mental powers, of preventing or correcting prejudice and error, and of enlarging the stock of useful knowledge. By analysing the principles of action, and tracing the origin and progress of affection, habit, and character, it leads to the proper discipline of the heart, and supplies the most efficacious means of correcting all undue bias of self-love, of resisting the motives to vice, of restraining the exorbitance of the passions, of cultivating virtuous principles, and of attaining that just and beautiful

tiful symmetry of the affections, that elevation of mind and disinterestedness of character, which, when combined with vigour of intellect and comprehension of views, constitute the true dignity and happiness of man.

A correct knowledge of the structure of the mind, as far as it can be attained, is also of great use in social life. It necessarily lies at the foundation of every just theory of religion and morals. It is especially essential to the conduct of education upon a rational, liberal, and useful plan ; both as it leads to the most easy and impressive mode of communicating instruction, and as, by exposing to view the various springs of action in the breast, it directs the intelligent observer to that mode of conduct and of discipline by which the tender and susceptible mind may be preserved from the aberrations of folly, and the pollution of vice ; may be formed to wisdom, honour, and virtue ; and may be led to the acquisition of those habits by which it may be qualified to appear with the most distinguished lustre and advantage in that sphere, whether of public or of private life, in which it may be destined afterwards to move.

In the political world, a profound knowledge of human nature is of the most obvious importance. It not only qualifies the well informed and sagacious statesman to judge correctly of the true interest of the community at large, but it teaches him how to guide the various passions and contending interests of parties, and of individuals, to the general good: and, by adapting measures to circumstances that arise, and by accommodating them to the views and feelings of the different classes of the community, to conciliate the affection of the people, and to secure a willing and almost unlimited subjection to civil authority, independent of the exercise of external force.

Finally, the analysis of the human mind is a sublime and interesting subject of philosophical speculation, which tends beyond all others to correct, enlarge, and exalt our conceptions of the attributes and character of the Supreme Being, and to lay a foundation for the most rational and exalted piety.

SECTION II.

*Rules of Philosophising.—Philosophical
Hypotheses.*

THE RULES OF PHILOSOPHISING, which, since the time of Newton, have been universally adopted by philosophers, and a strict adherence to which has been the source of all modern improvements in natural philosophy, are the following :

First, that no more causes of phenomena are to be admitted than what are real, and sufficient to explain appearances.

Secondly, that phenomena of the same sort are to be accounted for by the same cause.
And

Thirdly, that qualities which are invariably found to belong to all substances to which experiments can be applied, are to be supposed to belong to all substances.

These rules, which have been so successfully applied to the investigation of the phenomena of nature, ought to be adhered to with equal

rigour in our attempts to solve the phenomena of the mind *.

A **HYPOTHESIS** is the supposed cause of known phenomena. That a charged jar will give a disagreeable shock to a person who forms a part of the electric circuit between the inner and the outer coating is an established fact. But, that by the action of the machine the equilibrium of the electric fluid is disturbed, that one side of the jar is electrified positively, and the other negatively, and that the shock is produced by the effort of the electric fluid to restore the equilibrium, is a theory or hypothesis.

Many persons have conceived a strong dislike to hypotheses, as such, and think that philosophy should confine itself wholly to facts and experiments. This is unreasonable.

A man who makes experiments at random may accidentally hit upon some important discovery. But as all rational hypotheses are formed upon some analogies to known facts, a philosopher who pursues a course of expe-

* Hartley on Man, ch. i. p. 1.

Priestley on Matter and Spirit, vol. i. p. 1, 2.

riments to verify, correct, or disprove a hypothesis, will be much more likely to extend the limits of knowledge. And the history of philosophy proves that some of the most important discoveries have been made, accidentally or otherwise, in this way. Tycho Brahé warned Kepler against indulging fanciful hypotheses: but the ardent mind of that acute philosopher revolted from the yoke of authority. And observing that the phenomena of the solar system could not be explained by the supposition that the planets moved in circular orbits about the sun fixed in the centre, it occurred to him to examine the phenomena by placing the sun in the focus of an ellipse; and by this means he was led to the discovery of the true forms of the planetary orbits, and gradually developed the important fact, that the squares of the times of the periodical revolutions of the planets, are proportional to the cubes of their distances from the sun*.

It is an inferior, but not an inconsiderable advantage of a philosophical hypothesis, that, by arranging and classifying facts which have

* Maclaurin's View of Newton's Philosophy, p. 47.

been already discovered, it assists the memory in retaining and recollecting them, and thus facilitates the progressive improvement of science*.

When a hypothesis is fully established it becomes a fact; and new hypotheses are then invented to account for these facts. Thus we are gradually led on, through a series of subordinate causes, to the great First Cause of all. The Copernican theory of the universe, which was at first a hypothesis, has long been verified by observation and demonstration. And the inquiries of astronomers have since been directed to explore the hidden causes of the known revolutions of the celestial bodies.

The principal inconvenience of philosophical hypotheses arises from the danger to which the inventors or patrons of them are exposed, of being too strongly attached to them, and of assuming them as facts before they have been sufficiently proved. In this case, the judgment is biased in deciding upon experiments: arguments the most trivial, and appearances the most superficial, which fa-

* Stewart's Elements of the Philosophy of the Human Mind, p. 457—459.

your the darling system, are often received as demonstrations, while facts the most palpable, and objections the most weighty, are overlooked or treated with contempt. A true philosopher will vigilantly guard against this seductive prejudice. His sole object is truth, and he will be ready to discard the most favourite hypothesis when it shall be proved to be erroneous. "It is mentioned as a striking circumstance in the character of Sydenham, that, although full of hypothetical reasoning, it did not render him the less attentive to observation: and that his hypotheses seem to have sat so loosely about him, that either they did not influence his practice at all, or he could easily abandon them whenever they would not bend to experience*."

That hypothesis is most agreeable to the analogy of nature, and therefore the most probable, which solves the greatest number of appearances by the fewest and simplest principles†.

* Dugald Stewart's Elements, &c. p. 438—440.

† Pristley on Electricity, part iii. sect. i.

CHAPTER I.

GENERAL ENUMERATION OF THE FACULTIES—PERCEPTION.

SECTION I.

*General Account of the Faculties of the Mind.—
Hypothesis of Common Sense examined.*

THE FACULTIES OF THE HUMAN MIND are those powers or properties by which the man becomes capable of action, enjoyment, or suffering. They may be classed under the following heads :

I. PERCEPTION, or the faculty by which we acquire sensations and ideas. This is the primary faculty of mind.

II. THE CAPACITY FOR PLEASURE AND PAIN.

III. ASSOCIATION, which is that principle or faculty by which two or more sensations, ideas, or motions, are so united together that any one of them impressed alone shall excite all the rest.

This

This principle is applied by Dr. Hartley to the solution of all the complex phenomena of the human mind.

IV. SENSATION is the faculty of acquiring certain internal feelings, by the impression of external objects upon the correspondent organs of sense. These internal feelings are called sensations.

V. THE UNDERSTANDING, OR INTELLECT. This is the faculty by which we contemplate ideas, and pursue truth.

VI. MEMORY, which is the power of retaining and recollecting ideas, in the same order in which they were acquired, or in which impressions were made.

VII. IMAGINATION is the power of recollecting and combining ideas, in an order different from that in which they were originally impressed.

VIII. AFFECTIONS, OR PASSIONS, are feelings arising from the perception of pleasure or pain ; that is, of natural good and evil, according to the circumstances in which they are placed. " By the affections," says Dr. Hartley, " we are excited to pursue happiness and all its means, to flee from misery and all its apparent causes."

The

The **PRIMARY AFFECTIONS** are ten: five grateful, and five ungrateful.

The five **GRATEFUL AFFECTIONS** are love, desire, hope, joy, and pleasing recollection.

LOVE arises from the contemplation of natural good abstractedly considered; **DESIRE**, from considering it as possible; **HOPE**, from natural good, considered as probable; **JOY**, from the actual possession of it; and **PLEASING RECOLLECTION** is excited by the review of it when past.

The five corresponding **UNGRATEFUL AFFECTIONS** are **HATRED, AVERSION, FEAR, SORROW, and DISPLEASING RECOLLECTION**, which are excited respectively by the consideration of natural evil in the abstract, or as possible, probable, present, or past.

The more **COMPLEX AFFECTIONS** are compounded of the primary ones, and their analysis will be hereafter explained*.

IX. VOLITION is that state of mind which immediately precedes actions that are called voluntary. It is a modification of the affection of desire.

* Hartley on Man, part i. ch. iii. sect. iii. ad fin.

X. **POWER** is that faculty which the mind possesses, or is supposed to possess, of executing its volitions *.

It has been advanced as a self-evident fact, that all the faculties of mind are original principles, that the affections are instinctive, and that some dictates of the intellect are primary truths, which are to be regarded as the infallible suggestions of the Great Author of the constitution of man, and are not amenable to the tribunal of reason; that the suggestions of the moral instincts, antecedent to all reasoning, are of the highest and most sacred authority, and that the neglect of these suggestions, and much more acting in contradiction to them, is in a very high degree criminal and dangerous. These innate principles have been multiplied arbitrarily and indefinitely to such a degree, that the pleasure which men take in hunting and fishing, and even the love of war and military glory, have been inserted in the catalogue of natural instincts †.

* Hartley on Man, part i. Introduction.

† Reid's Inquiry into the Human Mind, p. 102—105.

——— Essay on Intellectual Powers, p. 304, 305.

——— Essay on Active Powers, p. 312.

Lord Kaime's Sketches of the History of Man, part i.

14 FACULTIES NOT INSTINCTIVE.

The advocates of this hypothesis do not attempt to reason upon it, or to bring evidence in support of it. They at once assume it as a fact; and if any objection be proposed, it is silenced by an authoritative appeal to common sense.

Against this hypothesis, which arrogates so much and proves so little, it is objected, that the affections, and likewise the intellectual and moral principles, if instinctive, would be universal, and their dictates irresistible, like those of sight, hearing, and the other natural senses; that some even of the strongest affections are allowed to be factitious, as the love of money, from which we may reasonably infer that all are so, though some may have been generated before the memory began to register its ideas; that many principles, which are stated by the advocates for this hypothesis as primary truths and self-evident moral principles, have been doubted and denied; that the hypothesis of instinctive principles is destitute of simplicity, and therefore contrary to the general analogy of nature; that it explains no phenomena, but rather gives up every thing as inexplicable; that resolving all faculties and affections into instinct,

strict, puts a stop to reasoning and to philosophical research; and that appealing to common sense for the establishment of a hypothesis, is little better than setting up vulgar prejudice, or gratuitous and confident assertion, as the standard of truth*.

A much simpler and more truly philosophical hypothesis, which assumes perception, a capacity for pleasure and pain, and the power of associating ideas, as the only original faculties, and which explains all the phenomena of mind by these principles alone, has been proposed by Dr. Hartley, and will hereafter be more fully stated and explained.

SECTION II.

Of Perception.—The Seat of the Sentient Principle.

PERCEPTION is the primary attribute of mind. It is the faculty by which we acquire sensations and ideas.

* Reid's Inquiry into the Human Mind.

Oswald's Appeal to Common Sense in behalf of Religion.

Beattie on the Immutability of Truth.

Priestley's Examination of Reid, Beattie, and Oswald.

Cooper's Tracts, p. 39—45.

SEN-

SENSATIONS, are feelings excited by the impressions of external objects upon the organs of sense.

IDEAS, are revived impressions or feelings, when the object or archetype is withdrawn.

This is Dr. Hartley's account of sensations and ideas, and in the main it agrees with that of Mr. Locke. Dr. Reid (*Int. Powers*, p. 360.) dislikes the word *idea*, and prefers *conception*. The terms are of little consequence; the fact is obvious, and the distinction between ideas, or conceptions, and sensations, is easily understood and universally admitted.

PERCEPTION is an indefinable principle or power. Its existence can only be known by consciousness, or the experience which every man has of what passes within himself. It is an old observation, that the mind is as incapable of comprehending the nature of perception, as the eye of seeing itself*.

PERCEPTION is usually assumed to be a simple principle, an indivisible power; and many conclusions of no small importance are deduced from this supposed simplicity; such as the immateriality, the inextension, the indis-

* Cic. *Tusc. Quæst.* lib. i. sect. 28.

ceptibility, the incorruptibility, and even the natural immortality of the percipient principle and substance. But the absolute simplicity of perception is not to be conceded without proof. Abstract ideas, such as cause and effect; and mental affections, such as desire, hope, fear, love, and hatred, are vulgarly thought to be simple feelings, but are, in fact, exceedingly complex. Life, whether vegetable or animal, is commonly presumed to be a simple principle; yet it is unquestionably the result of very complex organization: why then may not perception be a complex feeling, resulting from the combination of some unknown simple principles, capable of being resolved into its constituent principles, and of being the property of a discernible and dissoluble substance? Perhaps future and more accurate observations of the phenomena of mind may solve this difficult problem; in the mean time it is unwarrantable to decide with confidence in a case of which we are totally ignorant.

That the SEAT OF PERCEPTION, or of the sentient principle, whatever that be, is in the BRAIN, has been argued from the following considerations.

The nerves upon which sensation and motion depend, originate in the brain.

If a strait ligature be made upon any nerve, or if it be cut asunder, sensation continues in the part that is connected with the brain, and ceases in that which is separated from it.

In men, and in most other animals, death ensues if the head be cut off, or the brain taken out, or the cerebellum wounded.

All known disorders which affect the intellect are seated in the brain.

The principal organs of sense are placed in the head, in the vicinity of the brain.

Dr. Watts remarks that, when we think, we feel a consciousness that the faculty then exerted exists within the head.

It is difficult to ascertain the particular region of the brain with which the power of thinking is more immediately connected. But as the nerves originate in the medullary part of the brain, and are themselves of a white medullary substance; as the perfection of the faculties depends upon the perfection of the medullary substance; and as all injuries to that substance affect the trains of ideas proportionably; it is sufficiently manifest that the white medullary substance of the brain is the im-

diat instrument by which ideas are presented to the mind *.

Some philosophers have supposed the sentient principle to be seated in the meninges, others, in the fourth ventricle of the brain, or in the corpora striata. Des Cartes thought that it had its place in the pineal gland. Some of the ancients placed it in the heart, and Van Helmont in the mouth of the stomach †.

* Hartley, part i. prop. 1, 2.

Darwin's Zoonomia, vol. i. sect. 2.

† Keil's Anatomy, ch. iv. sect. 2, 3. vii. 1—3.

Cartesius de Pass. sect. 32, 38, 47.

Bacon's Natural History, cent. 4. numb. 400.

Watts, essay iii. p. 78—80.

Doddridge's Lectures, prop. iv.

CHAPTER II.

OF THE CAPACITY FOR PLEASURE AND
PAIN.

THE existence of this CAPACITY we learn by consciousness; what PLEASURE and PAIN are we learn by experience; and they are feelings, the idea of which cannot be communicated by definition.

That which produces pleasure is called NATURAL GOOD; that which produces pain is NATURAL EVIL.

The pleasures and pains are either SENSIBLE or INTELLECTUAL; that is, they are the effect either of SENSATIONS or IDEAS: and each will be considered in its proper order.

Some degree of pleasure or pain seems to accompany all our sensations and internal feelings, and to be necessary to excite attention to the objects of perception.

The pleasures and pains of children evidently result entirely from present impressions: this seems likewise to be in a great measure

measure the case with brutes, especially with those of the less sagacious species. But as reason advances to maturity, pleasure and pain become more dependent upon association, and are less connected with immediate sensible impressions; so that, upon the whole, the balance may be greatly in favour of pleasure, when the present sensible impression is severe pain; and conversely, pain may preponderate, when the present sensation is exquisitely pleasurable. But the analysis of the various classes of pleasures and pains will be the subject of future inquiry.

CHAPTER III.

OF THE LAW OF ASSOCIATION—AND OF
THE THEORIES WHICH HAVE BEEN PRO-
POSED FOR EXPLAINING THE PHENOMENA
OF THE MIND.

SECTION I.

Of the Law of Association.

ASSOCIATION is that LAW of the mind by which two or more sensations, ideas, or muscular motions are so united, that any one of them impressed alone shall introduce all the ideas or motions connected with it.

The existence of this LAW we learn by consciousness, and it is proved by all the phenomena of mind. Of the physical cause of this cohesion of sensations, ideas, and muscular motions, we are ignorant; as we also are of the causes of the cohesion and of the gravitation of matter. This LAW seems
to

to have been first noticed by Mr. Locke, but he applies it to the solution of very few phenomena. Mr. Gay, in a Dissertation upon Virtue, prefixed to Law's translation of King's Origin of Evil, deduces the moral feelings from association : and Dr. Hartley traces all, or at least most of the other phenomena of mind to the same cause.

All internal feelings not being sensations, are by Dr. Hartley called IDEAS.

IDEAS are either SIMPLE OR COMPLEX.

A SIMPLE, or, as it is sometimes called, a singular or particular IDEA, is the idea of one individual object. These Dr. Hartley calls ideas of sensation, because they resemble sensations.

COMPLEX IDEAS are made up of simple ideas. These Dr. Hartley calls intellectual ideas, of which ideas sensations are the elements *.

THE LAW OF ASSOCIATION extends to SENSATIONS, to IDEAS, and to MUSCULAR MOTIONS.

* Hartley, vol. i. part i. Introduction.

It would have been better if Dr. Hartley had used the words single and compound, instead of simple and complex ; other definitions having been previously appropriated to these terms by Mr. Locke.

24 ASSOCIATION OF SENSATIONS.

FIRST, The LAW OF ASSOCIATION has respect to SENSATIONS. A SENSATION may be associated with other SENSATIONS, with IDEAS, or with MUSCULAR MOTIONS.

CASE I. A SENSATION, after having been associated a sufficient number of times with ANOTHER SENSATION, will, when impressed alone, excite the SIMPLE IDEA corresponding with the other sensation.

Thus names excite the ideas of visible objects, and visible objects of names. Hearing a particular tune has been known to excite in the Swiss troops, when at a distance from their country, an irresistible desire of returning home. And captain King relates, that the sight of a half-worn pewter spoon, in a miserable hut upon the banks of the river Awatska, stamped on the back with the word London, excited a train of pleasing thoughts, anxious hopes, and tender recollections, in the breasts of himself and his companions, which it was impossible to describe. The power of Association is, indeed, too obvious to be overlooked by the most superficial observers of human nature *.

* Stewart on the Human Mind, p. 275.—277.

REMARKS.

1. A Sensation associated with another Sensation can only excite the Idea of the object : not the very Sensation itself, for to this the presence of the archetype is universally necessary.

2. Sensations are impressed either at the same instant of time, or in contiguous successive instants. Hence it follows, that the corresponding associations are either synchronous, or successive. The name of an object, for instance an orange, is often impressed at the same time with the visible appearance, the flavour, the odour, and the tangible qualities ; in which case the name, or the visible appearance alone, will excite at once the correspondent ideas of all the other qualities, and the association will be synchronous.

But, if the impressions be made in succession, as in the repetition of the alphabet, the cardinal numbers, the notes of a simple melody, the lines of a poem, or the like, the association will be successive, and the first will introduce the second, the second the third, and so on, Thus the two or three first notes
of

of a familiar tune suggest the ideas of the rest in succession.

3. Associations are most easily formed, and most permanent, when they are attended with a considerable degree either of pleasure or pain.

4. If the same Sensation be associated at different times with various other Sensations, it will at length, when impressed alone, excite ideas of all the rest; which by association will gradually coalesce, and form one complex idea.

A child is told to call a particular animal a dog: in this case the word dog excites the idea of that individual only. He afterwards sees another animal which is also called a dog; after which the word dog excites not the idea of the first, nor of the second individual only, but an indistinct feeling compounded of both. The same process takes place in succeeding cases; till at last his general idea of a dog becomes a complex feeling, compounded of all the different sensations which have been impressed upon his mind: and comparing in many instances the points of resemblance in those animals to which the same name is given, he learns to apply it with

with propriety to all animals of the same species, that is, which agree in certain common properties. Thus abstract ideas are progressively formed, and the use of abstract and general terms is gradually acquired. In the same manner children form the general idea, and learn the proper application, of the words man, horse, quadruped, actor, judge, philosopher, soldier, and the like.

To this source are to be traced all intellectual, moral, and abstract ideas of every description: solidity, duration, virtue, cause, effect, &c., may be resolved into simple ideas of sensation.

The coalescence of these ideas is sometimes so perfect that it is extremely difficult to separate and analyse them. Ideas the most complex will often wear the appearance of perfect simplicity, and will bear no resemblance to the elements of which they are formed. So the whiteness of the sun's light, though compounded of the seven primary colours, resembles none of them, and is commonly mistaken for a simple and original colour.

These groupes of ideas are sometimes so strongly associated with a single word, that it shall

shall excite the whole at once, with the same precision as if they had been originally simple sensations : for instance, king, chancellor, player, thought, affection, and the like.

5. In the case of compound sensations, the recurrence of one will by association excite the ideas of all the rest.

In this manner the combination of the ideas of individuals forms the idea of species, the coalescence of the ideas of species forms the idea of genera, and that of inferior the idea of superior genera : and these having been for a sufficient length of time associated with the name, the sound of the word will at once excite the whole compound idea. Thus the mind rises from the idea of individuals, through the intermediate genera, till it reaches the genus generalissimum, or the abstract idea of being.

Compound ideas, which often recur, will gradually adhere more closely together ; that is, by association simple ideas will run into complex ones, complex into decomplex, and so on ad infinitum. Truth, justice, benevolence, faithfulness, &c., are all complex ideas. Virtue comprehends them all ; but the constituent

stituent ideas so perfectly coalesce under this word, that one is not to be distinguished from the rest.

In ideas that are very complex, the visible appearance is usually the most prominent, and introduces all the rest, like a great letter at the beginning of a word. Thus the words animal, quadruped, &c., first excite the visible appearance.

Simple or original ideas of sensation, which are the elements of complex ideas, resemble letters which are the elements of words: the coalescence of simple ideas into complex resembles the coalescence of letters into words; the coalescence of complex into decomplex ideas resembles the coalescence of words into sentences; and the various combinations of decomplex ideas resemble the combination of sentences in a continued discourse.

6. Successive associations do not so coalesce as to become perfectly synchronous, but they have a manifest tendency so to do; the intervals between the ideas being shortened as the association becomes more familiar. A piece of music, or a poem, when new, appears long, because the associations are not formed;

formed; but when it becomes familiar the mind glances over the whole almost instantaneously*.

SECTION II.

The same continued.

CASE II. A SENSATION associated a sufficient number of times with an IDEA will at length when impressed alone excite that very IDEA. Thus, words associated with ideas will readily excite them even when most complex. The words hero, philosopher, scholar, justice, truth, benevolence, and the like, whether written or pronounced, immediately call up with precision the correspondent ideas.

CASE III. A SENSATION associated with a MUSCULAR MOTION, will, after a sufficient time, excite that very MOTION without any intervening act of the will. A person mechanically turns his eye towards a man who calls him by his name; the flavour of food excites the action of deglutition; the appearance of the path guides the steps of the traveller; and the sight of his notes governs the fingers of the musical performer.

* Hartley on Man, part i. ch. i. sect. 2.

SECONDLY,

SECONDLY, THE LAW OF ASSOCIATION has respect to IDEAS.

An IDEA may be associated with a SENSATION, with an IDEA, and with a MUSCULAR MOTION.

CASE I. An IDEA associated a sufficient number of times with a SENSATION, will excite the SIMPLE IDEA belonging to that SENSATION.

Thus ideas, simple or complex, which have been sufficiently associated with names, will excite the ideas of their respective names. The colour of snow, will suggest the term, white; the idea of a chief executive magistrate, will suggest the word, king; and the idea of giving to every one his due, will call to mind the expression, justice.

CASE II. An IDEA associated with an IDEA will excite that very IDEA*.

Thus

* The numerous trains of associated ideas are divided by Hume into three classes, which he has termed contiguity, causation, and resemblance. "Nor should we wonder," adds Dr. Darwin, "to find them thus connected together, "since it is the business of our lives to dispose them into those three classes, and we become valuable to ourselves "and our friends as we succeed in it. Those who have
"combined

Thus the idea of benevolence associates itself with that of merit; the idea of courage with that of honour; the idea of great talents with that of reverence; the idea of cowardice with that of contempt; of cruelty with horror; and of meanness with shame.

CASE III. An IDEA associated with a MUSCULAR MOTION will excite that very MUSCULAR MOTION; the affection of desire, will produce the voluntary motion of the limbs; the affection of joy, will produce a pleasing cast of the countenance; fear, will excite trembling; grief, dejection; and horror, distortion.

“combined an extensive class of ideas by contiguity of time
 “or place, are men learned in the history of mankind, and
 “of the sciences they have cultivated. Those who have
 “connected a great class of ideas of resemblance, possess the
 “source of the ornaments of poetry and oratory, and all
 “rational analogy. While those who have connected great
 “classes of ideas of causation, are furnished with the powers
 “of producing effects. These are the men of active wisdom,
 “who lead armies to victory, and kingdoms to prosperity,
 “or discover and improve the sciences which meliorate and adorn
 “the condition of humanity.”—Hume’s *Essays*, vol. ii. sect. 3. Darwin’s *Zoonomia*, vol. i. p. 52.
 Stewart on the Human Mind, ch. v.

THIRDLY,

THIRDLY, The LAW OF ASSOCIATION extends to MUSCULAR MOTIONS.

MUSCULAR MOTION may be associated with SENSATIONS, IDEAS, and MUSCULAR MOTIONS.

CASE I. A MUSCULAR MOTION associated a sufficient number of times with a SENSATION, will excite the SIMPLE IDEA belonging to that sensation. Dancing will bring to mind the music with which it has been often accompanied.

CASE II. A MUSCULAR MOTION associated with an IDEA will excite that very IDEA. Exercise often suggests the idea and expectation of health; dancing excites those of cheerfulness and grace.

CASE III. A MUSCULAR MOTION associated with a MUSCULAR MOTION will excite that very MUSCULAR MOTION.

MUSCULAR MOTIONS by frequency of concurrence gradually adhere together, and excite each other either synchronically or successively, according to the order of impressions. The synchronous motions of the hands and feet in walking, and of the larynx and the fingers in fingering to the harpichord, are instances of the former; and the

D successive

successive motions of the lips in speaking, of the feet in walking, and of the fingers in playing upon a musical instrument without any intervention of the volition, are obvious examples of the latter *.

These cases are an illustration and amplification of DR. HARTLEY'S THEOREM, in which he comprises the whole doctrine of association.

IF ANY SENSATION A, IDEA B, OR MUSCULAR MOTION C, BE ASSOCIATED FOR A SUFFICIENT NUMBER OF TIMES WITH ANY OTHER SENSATION D, IDEA E, OR MUSCULAR MOTION F, IT WILL AT LAST EXCITE THE SIMPLE IDEA BELONGING TO THE SENSATION D, THE VERY IDEA E, OR THE VERY MUSCULAR MOTION F †.

Motions originally as well as secondarily automatic, that is, such as being originally voluntary are by habit become mechanical, may be associated with each other, and that either synchronically or successively; such as the motions of the heart, the arteries, the bowels, and the like ‡.

* Hartley on Man, part i. prop. xx.

† Hartley on Man, prop. xx. cor. vii.

‡ Darwin's Zoonomia, vol. i. sect. x.

Synchronous motions secondarily automatic, though succeeding each other with the most perfect facility, are often acquired with extreme difficulty. This is obvious in the case of learning to perform upon any musical instrument. "The slowness of those muscular movements which have not been associated by habit may be experienced," says Dr. Darwin, "by any one who shall attempt to saw the air quick perpendicularly with one hand, and horizontally with the other at the same time *."

SECTION III.

Cartesian Theory of Animal Spirits.

THE nerves are the media of sensation and motion; they originate in the medullary substance of the brain, and are continued to the several organs of sense: those upon which motion and feeling depend are distributed to every part of the body.

Various HYPOTHESES have been proposed concerning that particular affection of the brain and nerves, which is immediately connected with and productive of sensations,

* Zoonomia, p. 52.

ideas, and muscular motions: of these the most considerable are the Cartesian hypothesis of ANIMAL SPIRITS, and the Newtonian theory of VIBRATIONS.

THE HYPOTHESIS OF DES CARTES, adopted by Locke and many others, and upon which the language commonly used concerning mental operations is founded, assumes as a principle, that the nerves are tubes, conductors of a certain subtle fluid called the animal spirits, which is secreted in the brain.

It supposes that, when an impression is made upon the nerve, the animal spirits retreating back convey the motion to the brain; that there they make a trace corresponding with the external object, and that the formation of this trace or picture excites a sensation which continues as long as the animal spirits remain in that trace, that is, as long as the external object continues to affect the organ of sense: that the trace remains after the spirits are returned to their proper channel, which accounts for the retention of the idea in the absence of the archetype. The soul, residing in or near the pineal gland, was supposed to possess a power of directing the animal spirits at pleasure into any one of these

these traces, and by that means to excite the idea, or revived impression of the object, which would naturally be less vivid than the original sensation. Association is accounted for by the frequency of the passage of the spirits from one trace to another, wearing a track like a beaten path. To perform muscular motion, the animal spirits, at the pleasure of the mind, descend into the muscle by the motory nerves, and, by distending the belly of the muscle, contract its length, and thus produce the desired motion of the limb.

Against this hypothesis it has been objected, that the nerves have not yet been proved to be tubes, and, that it is most probable they are not; that the existence of such a fluid as the animal spirits has not been ascertained; that the province assigned them in this theory is very unsuitable to the nature of a fluid; that the hypothesis does not agree with the phenomena of the senses, nor with the mode in which impressions are made upon the nerves; and finally, that though the hypothesis is ingenious, and might be of use for the purpose of the connection and arrangement of ideas till a better theory was proposed, it is entirely unsupported by facts,

and will account in a satisfactory manner for very few of the phenomena of the human mind*.

SECTION IV.

Newtonian Theory of Vibrations.

THE THEORY OF VIBRATIONS suggested by Sir Isaac Newton, adopted and amplified by Dr. Hartley, and supported by Doctor Priestley, assumes that the nerves are continuations of the medullary substance of the brain; that impressions made upon the organs of sense produce VIBRATIONS in the minute particles of the nerves †; that these vibrations are propagated to the brain; that a

* Cartesii Princip. et de Passionibus.

Locke's Essay, book i. ch. xxxiii. sect. 6.

Watts's Essays, numb. 3.

Priestley's Abridgment of Hartley, Introd. p. viii. ix.

† The nerves are not supposed to vibrate like musical chords: "This (as Dr. Hartley observes, p. 5, quarto), "is highly absurd; nor was it ever asserted by Sir Isaac "Newton, or any of those who have embraced his notion of the performance of sensation and motion by "means of vibrations." Nevertheless, this erroneous conception of the doctrine has given birth to most of the objections which have been urged against it.

vibration

vibration is excited in the particles of the corresponding region of the medullary substance; which vibration excites a sensation in the percipient principle, which remains as long as the vibration lasts, that is, as long as the object continues to affect the organ of sense; which object being removed, the vibration gradually subsides*.

The medullary substance having once vibrated in a particular manner, does not return entirely to its natural state, but continues disposed to vibrate in that manner rather than another: as a stick which has been bent does not, when the pressure is removed, entirely recover its straightness again. This TENDENCY of the brain to the renewal of the vibration, is the cause of the retention of the idea in the absence of the archetype.

Whatever renews the vibration renews also the perception; but the renewed vibration being less vigorous than the original one, (unless when excited by the presence of the object, or in certain morbid cases) is called a **MINIATURE VIBRATION, OR VIBRATION UNCLE**; and the renewed perception, corresponding with it is an idea.

* Newton's Optics, qu. 12—14.

Vibrations may be revived not only by the repetition of external impressions, but by their ASSOCIATION with each other. And of vibrations which have been associated together a sufficient number of times, either synchronically or in succession, if one be excited it will excite the miniatures of all the rest. This hypothesis affords a solution to the phenomena of the association of ideas.

The NERVES are divided into two classes, SENSORY and MOTORY: the former are the immediate instruments of sensation, the latter of motion; both originate in the medullary substance of the brain, and their vibrations influence and modify each other. Hence muscular motions are associated with sensations and ideas; and conversely sensations and ideas produce muscular motions.

This theory supposes every sensation, idea, muscular motion, affection, and internal feeling whatever, to correspond with some vibratory state of the medullary substance; so that one may be regarded as the exponent of the other.

The principal ARGUMENTS in favour of the theory of vibrations are the following:

I. IMPRES-

I. IMPRESSIONS made upon the principal organs of sensation are vibratory ; the vibratory agitations of light and of air, or any other medium of sound, may reasonably be supposed to excite corresponding vibrations, directly or indirectly, in the minute particles of the optic and auditory nerves. It is not at all necessary to this, that the vibration of the nerve should be exactly synchronous with that of the impinging particles. The vibrations of a musical chord will produce corresponding vibrations in chords which are an octave above or below, and even in thirds, and fifths. The vibration of the nerve being propagated to the brain, produces a corresponding agitation in the medullary substance. From analogy it is reasonable to believe that impressions made upon the less perfect senses, produce vibrations in their corresponding nerves. Effluvia from odoriferous bodies in particular, striking in successive pulses upon the olfactory nerve, would naturally excite a vibratory motion.

In what way the vibration of the medullary substance excites sensations and ideas, this hypothesis does not pretend to explain : it only guesses, or at most forms plausible conjectures concerning that state of the me-

dullary substance which is the exponent of the phenomena of mind.

II. THE HYPOTHESIS OF VIBRATIONS solves, in a very simple and easy manner, many PHENOMENA of the human mind, of which no other solution equally satisfactory has yet been proposed.

1. It accounts for SENSATION, MEMORY, and RECOLLECTION, in the manner which has been already explained.

2. It accounts for the CONTINUANCE of the sensation, where the original impression is unusually vivid, for a short time after the sensible object is withdrawn, as in the case of gazing at a strong light, &c. When vibrations are unusually vigorous, they take a longer time before they subside. And it is a fact particularly worthy of observation, that vibration is almost the only motion which can exist permanently in the same place.

3. It accounts in a very pleasing and satisfactory manner for the various and interesting phenomena relating to the law of ASSOCIATION.

4. It well suits the phenomena of SLEEP. Warmth expands the blood and the vessels in the head; and the reaction of the skull presses

presses them back upon the medullary substance. Thus the vibrations are impeded; sensation is gradually suspended, and sleep induced *.

5. It is agreeable to the phenomena of DREAMS and PHRENSY; in the former case, the derangement of the medullary substance produced by the pressure of the vessels disturbs the intellectual faculties, and the exclusion of external objects increases the difficulty of distinguishing between sensations and ideas. In the latter, the morbid state of the brain renders ideal vibrations equally vigorous with the original sensory ones, which occasions the corresponding ideas to be mistaken for sensations. Upon this principle many stories of extraordinary appearances may be easily accounted for.

6. The theory of vibrations explains in a simple and probable manner the phenomena

* The remarkable case of the Parisian beggar is alleged by Dr. Hartley as an argument, to show, that the brain is compressed during sleep. This person had a perforation in his skull that did not ossify; whence, by external pressure upon that part, the internal regions of the brain might be affected; and it was constantly observed, that as the pressure increased he grew more and more sleepy, and at last fell into a temporary apoplexy.—Hartley, p. 25, quarto.

of PLEASURABLE and PAINFUL SENSATIONS.

Moderate vibrations are the causes of pleasure; violent vibrations are the cause of pain. Hence the same sensation which in a moderate degree is pleasurable, may by increasing beyond certain limits become exquisitely painful, as in the case of heat. Dr. Hartley conjectures, that the precise limit between pleasure and pain is the solution of continuity in the nerve that vibrates.

7. Hence we also account for the PLEASURE which accompanies the recovery from painful disorders, and from the RECOLLECTION of past pains, dangers, and troubles. The vigorous vibrations which occasion pain, subside by length of time within the limits of pleasure. Hence, perhaps, we may learn to account, in part at least, for the existence of evil in the universe, and to assign a reason why a state of probation, to beings constituted like ourselves, should be in a considerable degree a state of suffering. Pains the most exquisite and durable may ultimately fall within the limits of pleasure, and may even be essential to the production of the greatest good *.

* Hartley on Man, part. i. ch. i.

Priestley's Abridgment of Hartley, Introd. essay i.

SECTION V.

The Theory of Vibrations applied to the Phenomena of Muscular Motion—Objections answered.

THE contraction of a muscle seems to depend in part upon the irritability of the muscular fibre, but chiefly upon the NERVE ; for, if the nerve be divided, or lacerated, or paralyzed, all motion, at least all voluntary motion, ceases.

All VOLUNTARY MOTION depends upon the continuation of the nerve to the brain.

That the affection of the motory nerves is VIBRATORY, is argued from the ANALOGY of the sensory to the motory nerves, and from the dependance of motions, both automatic and voluntary, upon sensations and ideas.

It is also inferred from ANALOGY, that in every case of muscular motion there is a vibration in the medullary substance of the brain, corresponding with it and productive of it.

VIBRATIONS in the SENSORY NERVES, excited by the impression of external objects
and

and propagated to the brain, communicate vibrations to the corresponding motory nerves, and produce muscular motions *.

The brain having vibrated in any particular direction a sufficient number of times, retains a PERMANENT TENDENCY to vibrate again in the same direction; and thus by association MOTORY VIBRATIONS may be produced in the same manner as sensory ones.

These MINIATURE VIBRATIONS may be either SYNCHRONOUS, or SUCCESSIVE, and by association may be so strongly cemented together, that when one is excited it shall awaken all the rest, and produce the correspondent muscular motions.

IDEAL VIBRATIONS may by association

* It is conjectured that electricity, or rather the Galvanic principle or fluid, is the power which brings the muscular fibres into action, but in what manner is not known.

See Dr. Crawford's Propositions on Animal Electricity, in Dr. Priestley's Lectures on Chemistry, p. 164—169.

"The nerves which serve the purposes of muscular motion principally arise," says Dr. Darwin, "from that part of the brain which is lodged in the head and back, erroneously called the spinal marrow; and if a ligature be put on any part of their passage, all motion ceases in the parts beneath the ligature."—*Zoonomia*, vol. i. p. 7.

be connected with motory vibratiuncles so that they shall excite each other.

And if ideal vibratiuncles should in any circumstances become, as in fact they may, as vigorous as sensory vibrations, the corresponding motory vibratiuncles will be proportionably vigorous.

Lastly, motory vibratiuncles may also become associated with SENSORY VIBRATIONS, different from those by which they were originally produced.

MUSCULAR MOTION is either ORIGINALLY AUTOMATIC, SEMIVOLUNTARY, PERFECTLY VOLUNTARY, OR SECONDARILY AUTOMATIC.

1. All muscular motions are ORIGINALLY AUTOMATIC. The irritation of the palm of an infant, produces the action of grasping; the access of air to the lungs, the act of breathing; of food to the palate and tongue, the act of swallowing, &c. The sensory vibrations ascending to the brain, descend from thence along the motory nerves, and excite muscular contraction*.

Motory

* Sir Isaac Newton affirms, "that all sensation is perceived, and also the limbs of animals moved, in a voluntary manner by the power and actions of a certain very
"subtle

Motor vibrations, produced by irritation or otherwise, passing freely along the surface of a membrane, sometimes seem to produce a contraction in the muscular fibres which checks them at once, in which case they pass instantly into the adjoining muscles, and produce sudden and convulsive motions. On this principle Dr. Hartley accounts for the phenomena of sneezing, snoring, coughing, hiccough, epilepsy, and convulsions previous to dissolution. It seems to be a fact that the

“subtle spirit, i. e. by the vibrations of this spirit, propagated through the solid capillaments of the nerves, from the external organs of the senses to the brain, and from the brain into the muscles.”—Hartley, p. 63, quarto ed.

According to Dr. Darwin, muscular motion consists in the contraction of the muscular fibre.

“All muscular motion arises either from irritation or the appulses of external bodies, sensation, volition, or association. These are the faculties of the sensorium in their active state, which in a state of inactivity are called irritability, sensibility, voluntariness, and associability.”

Dr. Darwin will not allow the sensorial motions to be called vibrations of the sensorium, but changes or motions of it peculiar to life. He has however advanced nothing to invalidate the arguments of Newton and Hartley, which make it probable that these motions are vibratory.—*Zoonomia*, vol. i. p. 32, 33.

cessation

cessation of vibrations in any considerable part of the body has a tendency to increase those of the neighbouring muscles. The stretchings and yawnings of persons disposed to sleep, may perhaps be traced to this source.

2. SEMIVOLUNTARY MOTIONS are those which in part, but not uniformly, follow the will: such for instance as breathing, vomiting, and the like. These motions are associated partly with sensory, partly with ideal vibrations. They are excited sometimes by a stimulus independent on the will: they are at other times in part restrained or accelerated by volition, a sense of decency, propriety, &c., with which they may happen to have been associated.

3. VOLUNTARY MOTIONS are such as immediately succeed to volition without the intervention of sensible impressions.

VOLITION, is the affection of desire separate from every tumultuous agitation of mind: it becomes associated with muscular motion, because experience proves that action is the usual means of gratifying desire. Thus ideal vibrations become associated with motory vibrations.

When desire by any means becomes as vivid as sensation, the correspondent motions will be equally vigorous with those which are excited by sensations. In this case the ideal vibratiuncles are as vigorous as the sensory vibrations, and the motory vibrations correspond with them.

Motions originally automatic become by association perfectly voluntary. Grasping is first produced by irritation; it gradually becomes associated with the visible appearance of the toy; of the child's own hand in the act of grasping; of another's hand in the same position; of the toy in the hand of another; with the sound of the words hold, take hold, &c.; with the idea of the object or the action; and with the affection of desire.

In these cases the motory vibrations are first associated with sensory vibrations, afterwards with sensory vibratiuncles, and by degrees with that complex state of the brain which corresponds with a complex feeling of the mind.

All other voluntary actions, such as those of the hands and feet, and the expressions of articulate sounds, are accounted for in the same way.

3. The DISPOSITION TO IMITATION in children is generated in a similar manner. Children see the actions of their own hands, and hear themselves pronounce. These impressions become associated circumstances, and will in due time produce a repetition of the action. Similar actions in others produce similar impressions upon the eyes and ears, which will be attended with similar effects: that is, they will learn to imitate what they see and hear.

4. MOTIONS ORIGINALLY AUTOMATIC, after becoming perfectly voluntary, by association become gradually involuntary, and in the end completely automatic again. A person learning to play upon the harpsichord exerts an express volition for every motion of the finger upon the keys of the instrument: by degrees the visible appearance of the notes will produce the motions without the intervention of volition: after a sufficient time the idea of the notes or of the sounds will have the same effect: and at last the motions will cling together, and produce each other in a manner perfectly automatic, without the intervention of volition, sensation, or idea, and even when the attention is wholly engaged upon a subject foreign to the performance.

Thus, MUSCULAR MOTION may be associated with SENSATION, with IDEA, with SENSATIONS FOREIGN to those by which they were originally generated, and with MUSCULAR MOTION.

Against the THEORY OF VIBRATIONS it has been OBJECTED, that it is inconceivable that so great a number of vibrations should exist in the medullary substance at the same time, and that they must confound each other. But in REPLY it has been urged,

1. That this fact is no more wonderful nor improbable, than that a number of musical vibrations should exist at once, and without confusion, in such a fluid as the air.

2. That vibrations in the medullary substance, like musical tones, when nearly synchronous, do actually blend with and modify each other.

That vibrations in the brain should correspond with and be the exponents of all the vast variety of ideas, simple and complex, which exist in the mind, is no more wonderful or incredible, than that all the varieties of language should be reducible to a few simple sounds.

TO ACCOUNT for the variety in the vibrations of the medullary substance, Dr. Hartley observes,

1. That

1. That there may be a difference in degree in the same vibration.

2. There may be a difference in the different kinds of vibrations.

3. One vibration in the medullary substance may be distinguished from another by its place.

4. There may be a difference in the line of direction, as entering by a particular nerve. Dr. Priestley adds,

5. There may be a difference in the constitution of the nerves of different senses, so that they may be as distinguishable from each other as different human voices sounding the same note.

It has further been objected to this hypothesis, that the very existence of these vibrations never has been, and never can be, proved; and that it is a hypothesis which tends to resolve every thing into mechanism, and is favourable to materialism.

But it is to be remembered, that the doctrine of vibrations is only proposed as a hypothesis, and by no means assumed as a fact, though pleaded for as probable. How far the hypothesis is supported by evidence, must be left to the decision of those who have in-

quired into the subject. How far it countenances the hypotheses, either of materialism or of mechanism, is a consideration quite foreign to the subject.

The theory of vibrations, if it should be admitted as true, can only be regarded as advancing one step in the science of human nature, by affording a solution of the phenomena of mental association. But the proper cause of nervous vibrations, the manner in which sensations, ideas, and muscular motions are excited by them, and the nature of perception, are mysteries which still remain wholly unexplained*.

THE DOCTRINE OF ASSOCIATION, is to be very carefully distinguished from the THEORY OF VIBRATIONS, being established upon independent evidence, and undeniable facts. This therefore must stand, though the other should be regarded only as a plausible hypothesis, destitute of satisfactory proof. It was to prevent the confusion of the nature and evidence of association and vibration, that Dr. Priestley

* Hartley on Man, part i. ch. i. sect. iii.

Priestley's Abridgement of Hartley, Introd. essay i.

Reid on the Intellectual Powers, essay ii. ch. 2—4.

Darwin's Zoonomia, vol. i. sect v—x.

published his edition of Hartley's work, from which the theory of vibrations is entirely excluded. Dr. Reid has done very little towards overturning the doctrine of association by objecting to the hypothesis of vibration. Nor does it appear that either Dr. Reid or any other of the Scottish metaphysicians, without excepting even professor Dugald Stewart, who has treated most largely upon the subject of association, perfectly comprehend Dr. Hartley's doctrine in its full extent.

CHAPTER IV.

OF SENSATION.

SECTION I.

General Distribution. Sense of Feeling.

THE SENSES are five in number: viz. FEELING, TASTE, SMELL, SIGHT, and HEARING.

No reason can be assigned why the number of senses should be limited to five, but the will of the Creator. To assert that more were impossible, would be as unreasonable as for a man born blind to deny the possibility of sight.

From each of the senses we derive SENSATIONS; IDEAS SIMPLE and COMPLEX; INTELLECTUAL PLEASURES and PAINS, that is, AFFECTIONS; and MUSCULAR MOTIONS, automatic, voluntary, semivoluntary, and secondarily automatic.

It will appear in the course of our inquiry, that the complex phenomena of the senses are
the

the result of the law of association, and that they are all reconcileable to the theory of vibrations, and give countenance to it.

It will also appear that the principal design of sensible impressions is to generate those intellectual ideas and feelings which constitute the most refined and permanent felicity of human beings: and hence it seems reasonable to conclude, that when these affections are sufficiently formed and fixed, they will stand in no further need of support from gross corporeal sensations, which therefore, like the scaffolding of a magnificent edifice, may, in a new and improved state of existence, be taken down and laid aside.

It will likewise be curious to observe the gradual tendency of the circumstances in which we are placed, and of the impressions to which we are exposed, to refine and spiritualize the affections, and to qualify and prepare the mind for a purer and nobler state of existence. This state of things constitutes one of the strongest natural presumptions in favour of the doctrine of a future life.

In a subject so complex and intricate, it will be necessary to limit ourselves to the selection
of

of a few of the principal phenomena under each head.

FIRST, OF THE SENSE OF FEELING. This is either general or particular.

GENERAL FEELING is that which extends to all parts of the body, internal and external.

PARTICULAR FEELING is that more exquisite degree of it which resides in the inside of the hands, and especially at the ends of the fingers.

The papillæ at the ends of the nerves are excited by gentle friction, and thus rendered more exquisitely sensible*.

I. SENSATIONS generated by the sense of feeling are principally these,

Heat and cold, hardness and softness, roughness and smoothness, moisture and dryness, fluidity, motion and rest, distance and figure.

I. The phenomena of HEAT and COLD correspond remarkably well with the theory of vibrations.

The standard of indifference to every individual is that degree of warmth to which he

* Zoonomia, vol. i. p. 109.

is most accustomed, and which excites no sensation either of pleasure or pain. It is produced by the usual state of the nervous system.

Gentle heat is pleasurable, extreme heat is painful; in the first case the vibrations are moderate, in the last violent, so as to produce solution of continuity. When a person is blindfolded, the sudden application of a very hot, or of a very cold body, excites sensations nearly similar; the heat, producing violent vibrations by direct action upon the nerves; the cold, suddenly checking the vibrations in the external parts, excites them indirectly with increased violence in the medullary substance.

The continued impression of heat makes us more sensible of cold, and vice versa; the standard of indifference being raised higher than usual in the former case, and depressed lower in the latter. Hence a temperate climate feels cold to a person who has lived in the torrid zone, and warm to a man who has been used to the frigid:

Heat and cold are relative terms: they are different degrees of the same sensation. Heat is excited when the vibration is *above*, cold when it is *below*, the standard of indifference.

A frozen

A frozen limb brought suddenly to the fire will first be much pained, and then mortify : plunged in cold water, or rubbed with snow, it will gradually recover life and warmth.

In the first case, the sudden heat will produce violent vibrations, which will remove the particles to such a distance that they cannot unite again : in the second case, the water or snow, being nearer to the standard of the frozen limb, produces gentle vibrations, which gradually recover life.

Friction produces heat by increasing the vibrations : for the same reason strong tastes leave a heat upon the tongue or fauces.

All strong emotions of mind increase the heat of the body, by increasing the vibrations of the medullary substance.

The pain of a wound, or of disease, such as the colic or the stone, produces chillness : that is, the inflammation produces a contraction of the skin, which checks the vibrations.

2. The SENSATIONS of OTHER TANGIBLE QUALITIES are not inconsistent with the theory of vibrations, though not so obviously favourable to it as the sensations of heat and cold.

3. VISIBLE

3. **VISIBLE APPEARANCES** are by association the exponents of tangible qualities, so that, as Berkeley expresses it, sight is a philosophical language for the ideas of feeling, and for the most part an adequate representation of them, and a language common to all mankind.

II. **IDEAS OF TOUCH** are either simple or complex.

SIMPLE IDEAS of touch are the representatives of particular sensations, but they are in general faint and indistinct, and by association with words soon run into complex ones.

COMPLEX IDEAS of touch are formed by association, viz. the repetition of the sensation of hardness, associated with the sound, or with the appearance, or even the idea of the word, excites the complex idea of hardness: so likewise softness, heat, cold, sensible pleasures, and pains.

We are so accustomed to judge of tangible qualities by visible appearances, that the corresponding ideas are constantly associated in the minds of persons possessed of sight. Hence it follows, that the tangible ideas of persons born blind must be far more definite and accurate than of those who see.

III. **INTEL-**

III. INTELLECTUAL PLEASURES AND PAINS : that is, AFFECTIONS.

The ten PRIMARY AFFECTIONS are generated by the original pleasures or pains of the sense of feeling, according to given circumstances. The pain of a burn may be the object of HATRED, AVERSION, FEAR, SORROW, or DISPLEASING RECOLLECTION : so likewise may pain in general ; as the pleasures of this sense may in their turn likewise be the objects of LOVE, DESIRE, HOPE, JOY, and PLEASING RECOLLECTION.

Exquisite pains or pleasures of this sense associate themselves with the persons, places, circumstances, &c. where or by which they were produced or enhanced, and generate correspondent COMPLEX AFFECTIONS of love, hatred, and the like. Thus the pain of a surgical operation, however beneficial in its consequences, is sometimes transferred to the idea of the operator, which never occurs afterwards without exciting sentiments of terror and disgust*.

* Dr. Hartley argues, that since the pains of feeling are far more numerous and violent than those of all the other senses put together, the greatest part of our intellectual pains are deducible from them.

Violent

Violent vibrations gradually subside into moderate ones within the limits of pleasure: hence painful sensations are sometimes followed by pleasing recollections.

IV. AUTOMATIC MOTIONS produced by the sense of feeling or touch.

These are the act of grasping in children: crying, as the consequence of pain; involuntary laughter, from titillation and the like.

V. MUSCULAR MOTIONS, VOLUNTARY, SEMIVOLUNTARY, and SECONDARILY AUTOMATIC.

Motions originally automatic may be associated with sensations, ideas, affections, and motions. Thus, the act of grasping, originally excited by pressure upon the palm, may be associated with the visible appearance of the object, the name, the affection of desire, with a motion of the eye, &c.

In correspondence with these associations the act of grasping becomes semivoluntary, voluntary, and secondarily automatic.

Crying, laughing, walking, and all other originally automatic motions, in the same manner, by association, pass into voluntary, semivoluntary, and secondarily automatic*.

* Hartley, part i. ch. ii. sect. i.

SECTION II.

The Sense of Taste.

SECONDLY, THE SENSE OF TASTE, like that of FEELING, is either GENERAL OR PARTICULAR.

The GENERAL SENSE OF TASTE, is that which extends through the whole ALIMENTARY DUCT.

The PARTICULAR SENSE, is that exquisite sensibility which resides in the tip of the tongue.

The peculiar sensibility of the tip of the tongue, is occasioned by the extremities of the nerves being formed into sentient papillæ, which are excited and brought into action by the friction of the tongue upon the palate.

I. SENSATIONS generated by the SENSE OF TASTE are all FLAVOURS: also, HUNGER and THIRST; the phenomena of which are subject to the law of association, and agreeable to the theory of vibrations.

I. FLAVOURS.

Sensations

Sensations of flavours must be as numerous and various as the distinct impressions upon the organs of taste; no two sapid substances having a flavour precisely the same.

That many of these flavours are very similar, is evident from the small number of names by which complex ideas of flavours are expressed; such as sweet, sour, bitter, acrid, salt, and the like.

The variety of flavours seems to depend upon the velocity and density of the correspondent vibrations.

It is a circumstance favourable to this supposition, that heating a sapid liquid increases its flavour; also, conversely, that strong flavours excite heat in the tongue and fauces.

We judge of flavours by visible appearances, odours, and other associated circumstances, as well as by impressions upon the tongue.

The sensibility of the alimentary duct, declines in proportion to the distance from the tip of the tongue.

Things which are unpleasant to the palate, are sometimes grateful to the stomach, such as bitters, spirits, cordials, and opium.

Also, substances which are offensive to the stomach are sometimes easy to the intestines; for instance, bile. The superior intestines are likewise more irritable than the inferior.

Things which are tasteless, or even pleasant in the mouth, sometimes disagree with the stomach and bowels, owing probably to a chemical decomposition of their parts in the process of digestion.

Sensations of taste vary in the progress from infancy to age.

Sweets grow less agreeable, and sometimes even disagreeable and nauseous.

Astringent, acid, and spirituous liquids, originally disagreeable, become pleasant.

Even bitters and acrids lose their disagreeable qualities, and after sufficient repetition give relish to aliment.

Particular foods and medicines become pleasant or disgusting by associated circumstances.

These facts are accounted for,

1. By the increasing callosity of the organs in advancing years.
2. By frequent repetition the state of the medullary substance may be changed, and vigorous

Vigorous vibrations may be renewed without a solution of continuity.

3. The flavour may be associated with grateful or disagreeable sensations, in the stomach and intestines, which in process of time will blend with, and over-rule the simple original impression.

4. The same effect may be produced by association with pleasures and pains of different senses; or with mental pleasures and pains. Thus, a nauseous medicine may be swallowed without reluctance, because it is salutary.

Desire of any particular kind of food or liquor, is often much more influenced by associated circumstances than by taste. Men like what they see others like, and drink to excess not from the love of liquor but of company.

2. HUNGER is a sensation at first moderately pleasing, but by degrees exquisitely painful: it is removed by aliment, and excited by abstinence, by air, and exercise, and other means.

The seat of hunger is chiefly in the stomach, but it extends its influence to the tongue and palate, the flavour of food when

a person is hungry being very different from the flavour of the same food when a man has no appetite. The sensations of the stomach are also communicated in some degree to the intestines.

Hunger is probably produced by the natural action of the muscles and fluids of the stomach upon the nervous fibrils, which are very numerous and exquisitely sensible; exciting at first gentle, but gradually vigorous and violent vibrations.

Aliment relieves hunger: it clogs the minute vessels, and absorbs the acrimonious fluids: by this means it checks the violence of the vibrations.

A person may relish high-seasoned food after hunger has been satiated with simpler aliment, for by irritation the vibrations may be renewed. Thus the appetite is stimulated by acids, fauces, and the like.

Bitters, cold air, exercise, a small quantity of food, and the like, excite hunger by promoting digestion, or by irritating the nervous fibrils, and producing vigorous vibrations.

By association hunger is excited by the visible appearance or the odour of agreeable food.

Absti-

Abstinence produces hunger, by reverſing the effects of aliment.

3. THIRST.

THIRST is the converſe of hunger; it ariſes from all conſiderable degrees of heat in the fauces; the nerves of the mouth and ſtomach are occupied with vibrations of the inflammatory kind, different from thoſe of hunger. Gentle acids yield pleaſure; cold liquids afford immediate relief; and warm diluents ſoften the parts, and waſh off acrimonious particles. In fevers the cauſe of thirſt being permanent, the ſenſation returns again and again till the fever is removed.

II. IDEAS.

SIMPLE IDEAS of taſte are as numerous as the ſenſations of which they are the reſentatives.

The ſmall number of words which expreſs the COMPLEX IDEAS of flavours, is a proof that the number of ſuch ideas is very ſmall.

Nevertheless, epicures, and perſons who value themſelves upon an exquisite taſte, have numerous ideas of flavours, to which they aſſign appropriate names.

III. INTELLECTUAL PLEASURES AND PAINS.

Some flavours are originally grateful, others are ungrateful. These, according to their circumstances, will excite the correspondent primary affections.

The pleasures of taste are much more numerous than the pains; they are frequently repeated, and continue from infancy to age. The miniatures of these sensations coalesce, and form a complex idea, which may be transferred by association to other objects. Hence we trace one principal origin of the social affections; for the pleasures of taste are usually and in a manner necessarily enjoyed in society.

The pains of taste chiefly rise from excess, and by frequent repetition produce hypochondriac disorders and morbid melancholy: the vestiges of these pains continually increasing while the cause remains, and being liable to be called up by association, upon slight occasions.

IV. AUTOMATIC MOTIONS generated by the sense of taste, or by impressions upon the alimentary duct*,

These

* Dr. Hartley conjectures, that impressions first made upon the sensory nerves, are communicated by them to the

These are suction, mastication, deglutition, distortion of the face by nauseous tastes, peristaltic motion of the stomach and bowels, vomiting, ructus, hiccough, spasms, expulsion of the fæces, &c.

The pleasurable impressions of food upon the tongue and fauces of infants, produce the motions which cause deglutition. The painful impressions of nauseous liquids contract the alimentary passage, and produce an automatic rejection of them in young children.

V. MUSCULAR MOTIONS VOLUNTARY, SEMIVOLUNTARY, and SECONDARILY AUTOMATIC.

Suction, mastication, deglutition, and other motions originally automatic, become by degrees completely voluntary by association, first, with sensory, and afterwards with ideal vibrations, or the feeling of desire.

Nausea, vomiting, expulsion of fæces, ructus, &c. in consequence of association with ideas of decency, shame, fear, and the like,

the motory, and so to the muscular fibre; but others suppose, that the irritation of external objects produces an immediate contraction of the fibril of the muscle and motory nerve, and that by association only it is connected with, not produced by, the corresponding affection of the sensory nerve.

become semivoluntary, or in a considerable degree voluntary*.

Mastication and deglutition become by association secondarily automatic, being performed generally in adults without any express act of the will†.

SECTION III.

Of the Sense of Smelling.

THIRDLY, THE SENSE OF SMELLING is of two sorts. First, that exquisite sensibility which

* Nausea, in a high degree, is produced by the motion of a ship. In a person who has suffered much by the sea-sickness, this nausea will be excited by going aboard a ship at anchor, by the smell of the ship, by its visible appearance, especially if in motion, by the smell of tar, or even by conversation upon the subject.

See a singular instance of nausea produced by association, in Darwin's *Zoönomia*, vol. i. sect. iii. 3.

† Hartley, part i. ch. ii. sect. ii.

Zoönomia, vol. i. sect. xxv. page 273, 274.

Dr. Hartley justly observes, that the action of deglutition affords manifest evidences of the gradual transition of automatic motions into voluntary ones, as well as of voluntary ones into such as are secondarily automatic.—
Vol. i. page 177.

resides in the nose, and is excited by the impression of odoriferous particles. Secondly, that sensation which most kinds of aliments or medicines impress upon the pituitary membrane, during mastication, and immediately after deglutition.

I. SENSATIONS.

1. Sensations of odours are excited by the irritation of the olfactory nerve, by particles emitted from odoriferous bodies. These particles are widely diffused, and probably repel each other: Perhaps they are thrown off by vibrations from the odoriferous body, and by their successive pulses excite a vibratory motion in the olfactory nerve*.

* Dr. Hartley remarks, that though odoriferous particles are more subtle than sapid ones, yet they are perhaps grosser than rays of light; for the smoke of a tallow candle ceases to smell when it begins to shine. He ranges the vibrations of the medullary substance in the following order, in respect of subtlety: heat, light, smell, tastes, tangible impressions, and the vibrations of the air from which sound arises. But these last may excite much more frequent vibrations in the auditory nerve than those of the sounding body: as vibrations from friction are much more numerous than the strokes of friction, and the tremors of the particles of an anvil are much more numerous than the strokes of the hammer.—Vol. i. page 184.

2. Hear,

2. Heat, friction, and effervescence, excite smells, probably by exciting vibrations.

3. To receive a smell in full strength and perfection, we make quick short alternate inspirations and expirations, analogous to rubbing the ends of the fingers upon the body to be examined by feeling, or the end of the tongue against the palate in tasting, in order to excite the sentient papillæ.

4. Pinching the nose prevents sensations in the pituitary membrane, by checking the nervous vibrations.

5. The greatness and quickness of the effect of some odours upon the nervous system, in producing fainting, &c. is accounted for by supposing that they agitate the whole system of medullary particles so much as to make them attract each other with sufficient force to stop all vibratory motions: similar to what sometimes happens in the particles of muscular and membranous fibres.

6. The specific differences of odours, like those of flavours, are probably owing to differences in the kind and degree of nervous vibrations,

7. Odours

7. Odours which in a moderate degree are grateful, in a high degree are disagreeable ; owing to the increased violence of the vibrations.

8. Sensations of odours are as numerous as odours themselves, no two odours being perfectly similar, though there is frequently a strong resemblance.

II. IDEAS SIMPLE and COMPLEX.

SIMPLE IDEAS of odours must be as numerous as sensations ; but they are indistinct, and soon slide out of the memory.

COMPLEX IDEAS are as numerous as the names by which they are distinguished : those in general use are very few ; but persons who make a business of attending to odours, such as perfumers and others, distinguish them by a variety of names, and possess a corresponding variety of complex ideas.

III. INTELLECTUAL PLEASURES and PAINS.

The primary affections are generated by odours, originally or by association, grateful or ungrateful, according to their respective circumstances, viz. ; a person loves, desires, enjoys, &c. the odour which refreshes him : hates, fears, &c. an odour that produces sickness and the like.

Ideas

Ideas of odours sometimes constitute an ingredient in the more complex affections.

Fragrance of the air, of flowers, and the like, tends to inspire or to cherish the love of rural life.

Offensive odours in various circumstances contribute to generate the sense of indecency, shame, disgust, and the like.

So far as smell and taste are connected with, or resemble each other, they mutually contribute to the formation of the same intellectual pleasures and pains.

IV. AUTOMATIC MOTIONS.

The principal is sneezing, produced by the irritation of the pituitary membrane, which, according to the theory already explained, by a sudden contraction communicates its vibrations to the neighbouring muscles.

V. VOLUNTARY, SEMIVOLUNTARY, and SECONDARILY AUTOMATIC POWERS.

The mind acquires a semivoluntary power of stopping, and in some cases of exciting, a sneeze; also of stopping the act of breathing through the nostrils.

And by association with ideas of pleasure and pain, and various states of mind, it acquires a perfectly voluntary power of alternate
expiration

expiration and inspiration, for the purpose of exciting a more exquisite sensation of odours *.

SECTION IV.

Sense of Sight.—Form of the Eye.—Nature of Vision.

FOURTHLY, THE SENSE OF SIGHT.

Of this sense the eye is the organ, the form of which is nearly globular, and it is inclosed in three distinct coats or teguments.

The external coat is called tunica sclerotica, the protuberant part of which is transparent, and is called the cornea.

The middle coat is called the choroides, or the uvea; the production of it under the cornea is called the iris, and gives the colour to the eye; in the middle of the iris is a circular hole, called the pupil. The iris is formed by muscular fibres, some of which are circular and concentric with the pupil, and the others are transverse, connecting the circular fibres together.

* Hartley, part i. ch. ii. sect. iii.

The inner coat is called, from the person who discovered it, *tunica Ruyschiana*.

Within the cavity of the eye is a soft transparent substance in the form of a double convex lens, called the crystalline humour. It is suspended within the eye by certain muscular ligaments called *ligamenta ciliaria*.

The cavity of the eye is thus divided into two portions, one of which is filled with a fluid nearly of the same density with water; called the aqueous humour; the other is filled with a fluid of greater density, called the vitreous humour.

At the back part of the eye, but not directly opposite to the pupil, enters the optic nerve, the fibres of which spreading over the innermost coat of the eye form a thin membrane called the *tunica retina*.

The innermost coat of the eye is every where covered with a very black substance, to hinder rays of light from being reflected to the retina, and rendering the images indistinct.

To form a general idea of the nature of vision, it is necessary to observe,

That rays of light proceed from every point

point in the surface of a visible body, in all directions and in right lines.

A number of rays diverging from a radiant point, constitute a cone or pencil of rays.

A pencil of rays passing through a convex lens converge to a focal point in a direction nearly opposite to the radiant point.

When the radiant points are contiguous to each other, the corresponding focal points will also be contiguous, and an exact but inverted image of the object will be formed in the focus of the lens: this appears in the common experiment of the camera obscura.

The humours of the eye are so constructed as to act upon the pencils of rays issuing from every point of a visible object and entering at the pupil, like a convex lens causing each pencil to converge to a focal point at the back of the eye, and thus impressing upon the retina an inverted image of the object.

The impression of this image produces vision, probably by exciting vibrations in the retina; and vision is more or less distinct according to the distinctness or indistinctness of the image upon the retina.

Some have supposed the choroides to be the seat of vision, because the surface of this

coat is smoother than the retina, and because an object is invisible when the image falls upon the place where the optic nerve enters the eye*.

SECTION V.

Sensations of Sight.

I. SENSATIONS OF SIGHT. Phenomena explained.

THE SENSATIONS OF SIGHT are LIGHT, COLOURS, VISIBLE FIGURE, VISIBLE MAGNITUDE, MOTION, and POSITION.

1. LIGHT.

LIGHT is a substance emitted from luminous bodies in all directions and in right lines.

The pulses of light excite vibrations in the optic nerve, which, being communicated to the brain, excite the sensation of light†.

* Rowning's Philosophy, part iii. ch. v. vi.

Adams's Philosophy, vol. ii. lect. xvii.

Zoonomia, vol. i. page 117.

† "The rays of light," says Dr. Darwin, p. 15, "excite the retina to animal motion by their stimulus;" which motions he very properly distinguishes both from communicated motions, from gravitating motions, and from the chemical class of motions.

After

After fixing the eyes steadily upon a luminous object, the luminous image remains a few seconds after the eyes are closed; the vibrations of the retina gradually subside.

A stroke upon the eye produces a flash of light: a luminous appearance like the eye of a peacock's feather is produced by shutting the eye and rubbing it in a morning. In these instances the optic nerve is put into violent agitation*.

2. COLOURS.

The rays of the sun's light consist of seven distinct species, which, being differently refrangible, are easily separated by a glass prism.

Each species of light, by the irritation of the optic nerve, produces a correspondent sensation of colour. The most refrangible rays excite the sensation of violet, the second of indigo, the third blue, the fourth green, the fifth yellow, the sixth orange, and the least refrangible, red.

These are called the primary colours. The whiteness of the sun's light is owing to the union of all the seven primary colours.

* Zoonomia, vol. i. sect. iii.

Sir Isaac Newton conjectures, that the sensations of different colours are owing to the different bignesses of the nervous vibrations excited by the different species of light; and particularly conjectures, that the most refrangible rays excite the shortest vibrations for the sensation of a deep violet, and the least refrangible the largest for a sensation of deep red; the intermediate rays exciting vibrations of intermediate bignesses for the sensations of the intermediate colours *.

3. VISIBLE MAGNITUDE.

Visible magnitude is extension of two di-

* Sir Isaac Newton also conjectures, (Qu. 24.) that the harmony and discord of colours arise from the proportions of the vibrations propagated through the optic nerves into the brain, as the harmony and discord of sounds arise from the proportions of the vibrations of the air.

Hartley pursues this idea, and conjectures, that the vibrations which excite the sensations of the primary colours are to each other in frequency, as

$$100 : 112\frac{1}{2} : 120 : 133\frac{1}{3} : 150 : 166\frac{2}{3} : 177\frac{1}{2} : 200.$$

which he observes are the simplest of ratios which are consistent with each other, and are the same ratios with those of the five tones and the two semitones comprehended within the octave.—Hartley, *Observations on Man*, prop. 56. Newton's *Optics*, b. iii. q. 13.

mensions

menfions only : the fense of fight does not perceive a third dimenfion.

The vifible magnitude of an object is not in proportion to its real magnitude, but to the magnitude of the image upon the retina.

The image upon the retina is in exact proportion to the optic angle, which is an angle formed by two imaginary lines drawn from the centre of the pupil to the extremities of the object, and is vertically oppofite to that which is fubtended by the image upon the retina.

4. VISIBLE FIGURE.

Figure is limited extenfion ; and vifible magnitude being of two dimenfions only, vifible figure is alfo limited to two dimenfions.

To perfons reftored to fight after having been long blind, all objects feem to touch the eye: it is by experience and by the fense of feeling only, that they acquire the idea of diftance.

Solid figures appear to the eye as plane figures only, v. g. a cone appears as a triangle, and a fphere as a circle, with certain diverfities of light and fhade.

5. VISIBLE MOTION.

This is a sensation acquired by the motion of images upon the retina corresponding with change of place in external objects.

But visible motion is a change of place in objects upon the same plane, and excites no sensation of true relative distance.

Giddiness is an apparent irregular motion of visible objects; it often immediately precedes a privation of sense and motion; and is owing to a general disorder in the medullary substance extending itself to the optic nerve.

6. VISIBLE POSITION.

Visible position is the relative situation of visible objects.

The visible sensation excited by the actual position of visible objects, is that of a picture, similar to that which is formed upon the retina, in which all the objects are upon the same plane, no one object being nearer or more remote than another.

Objects appear erect, though their images are inverted upon the retina. By experience, that is, by the sense of feeling, we learn the real position of visible objects, and by association we form a true idea of the real position from the visible appearance.

7. By

7. By association visible appearances become the EXPONENTS of tangible qualities*.

1. OF SOLIDITY AND FIGURE.

The visible appearance of solid bodies is that of a flat surface diversified with light, shade, and colour: by experience we associate the tangible qualities with the visible appearance; and constantly infer the latter from the former.

This judgment is commonly true, but in optical deceptions is erroneous. The association is so familiar, that the tangible quality is often mistaken for a visible sensation †.

2. OF TANGIBLE MAGNITUDE.

Of this we constantly judge by association, from the visible appearance.

* Berkeley's Theory of Vision.

† If a blind person, who by feeling could distinguish accurately between a globe and a cube, should suddenly be restored to sight, and a globe and cube should be placed before him upon a table, it is asked, whether he would be able, from the visible appearance only, to ascertain which was the globe and which the cube?

This question was proposed by Mr. Molyneux to Mr. Locke, and has been considered as a metaphysical puzzle ever since.—Locke's Essay, book ii. ch. ix. sect. 8, 9. Smith's Optics, vol. ii. Appendix, p. 27, 28. Locke's Fam. Lett. p. 134—138. Reid's Enq. ch. vi. sect. iii. Reid on Intellectual Powers, essay ii. ch. xxii. p. 288, &c.

If the distances of two objects are equal, that which appears under the larger angle is the larger object.

If the angles under which two objects appear are equal, that which is, or is supposed to be, at the greatest distance, is judged to be the larger object.

Whatever occasions an error in our judgment of the distance, produces an equal error in our judgment of magnitude.

Hence a fly in a window, referred to a distance in the field, is taken to be a horse grazing.

Objects seen through a fog are magnified, because from their indistinctness they are supposed to be at a greater distance.

The moon in the horizon being referred to a greater distance than when she is in the meridian, is thought to appear larger, though the angle subtended by her disk is precisely the same.

3. DISTANCE

Is an idea of touch, of which visible appearances are by association the constant exponent.

1. If the magnitude of the object be known, the distance is judged of by the apparent

parent magnitude, that is, by the angle under which it appears.

If the real magnitudes are equal, that which appears under the largest angle is the nearest.

If the angles under which two objects appear are equal, but the real magnitudes unequal, the largest object is the most remote.

Where magnitudes are mistaken, distances are also mistaken. Hence mountains at a distance are judged to be nearer than the fact. Objects magnified by a telescope seem nearer than they are; diminished they are judged to be more distant.

Children judge accurately only of small distances, and men by association judge more truly of distances upon level ground than from a lofty eminence, or a deep well.

2. We judge of distances by intervening objects,

For these serve as a sort of measure, without which our ideas of distance are very imperfect.

Hence, that is, from the want of intervening bodies, objects at sea appear nearer than they really are. And the zenith seems to be nearer

than the horizon. Hence the celestial bodies appear to be larger in the horizon than in the meridian. We are incapable of judging of their relative distances, as they all appear equally remote.

3. By the degree of distinctness with which minute parts are seen.

Objects indistinct are supposed to be distant : upon this principle distant objects are represented in landscapes.

4. By the brightness or obscurity of the visible object.

By this and the preceding rule, sailors learn by habit to judge of distances at sea with tolerable precision.

5. By the direction of the optic axes when objects are very near.

The optic axes are imaginary lines drawn from the points of distinct vision in each eye directly to the object.

The angle formed by these lines must be larger or less, as the object is nearer to or more remote from the eye.

That we judge of distance and position by the direction of the optic axes is evident, because a person who shuts one eye will not be
able

able immediately to guide his finger to a visible object within his reach.

6. The difference of the conformation of the eye, by moving or changing the figure of the crystalline humour, as the visible object is nearer or more remote, affords some assistance in judging of small distances.

4. MOTION.

Of real motion we judge by the motion of images upon the retina, by gradual increase or diminution of magnitude, brightness, distinctness, &c.

5. POSITION.

Position is relative distance; and real tangible position is judged of by the rules of real distance*.

6. That objects appear SINGLE when distinct images are formed on the retina of each eye, is evidently owing to habit, that is, to association: for, if one eye be distorted, so that the images do not fall upon corresponding

* We judge of the seat of impressions made on the external surface of the body, by the touch, by the visible appearance, and by experience; and of the seat of internal pains, by their proximity to the external parts, by skill in anatomy, the theory of diseases, &c. Hartley, prop. 31, 32.

points in each retina, the object appears double till custom rectifies the judgment, and with it the visible appearance*.

SECTION VII.

Sense of Sight continued.—Ideas.—Intellectual Pleasures and Pains.—Motions, Automatic and Voluntary.

II. IDEAS generated by visible impressions.

SIMPLE IDEAS being the representatives of sensations, the number of simple ideas corresponds with that of distinct visible impressions, and is continually changing, as old impressions are gradually effaced, and new sensations are excited.

COMPLEX IDEAS of sight being formed by the gradual coalescence of simple ideas, are as numerous, and perhaps more so than the names by which they are distinguished.

OBSERVATIONS concerning ideas of sight.

* It resembles this, says Hartley, and illustrates it, that if we cross the fingers and roll a pea between two sides which are not contiguous naturally, it feels like two peas, p. 205.—Hartley's Observations, part i. ch. ii. sect. iv. prop. 56—59. Reid's Enq. into the Hum. Mind, ch. vi.

I. These

1. These ideas are more vivid and definite than the ideas of any other sense.

2. This vividness and precision relates more to tangible qualities than to colours. Magnitude and figure recur incessantly : ideas of colours often require an exertion of the voluntary powers.

3. The precision and vividness of these ideas is chiefly owing to the distinctness of their impressions upon the retina, and the perpetual recurrency of visible objects during the whole time that we are awake.

4. These ideas are associated with various internal feelings, some of which are associated with words, others have no names. Hence arise the voluntary and semivoluntary powers of exciting visible ideas.

5. A desire to excite some visible idea, v. g. if a person is told to think of a horse, will produce some individuum vagum, or indefinite notion connected with the train of ideas or feelings then passing through the mind : in this case the effect is imperfectly voluntary.

6. A visible idea is perfectly voluntary when it constantly follows the volition ; and the previous circumstances which determine
the

the volition, generally excite the idea: for example, if a person desires me to think of a particular horse, the sound of the words both determines the volition and excites the idea.

7. There is a peculiar connexion between the ideas of sight and hearing*.

The name of an object excites the visible idea, and the visible appearance of an object excites the idea of the name.

8. Trains of visible ideas are in a particular manner affected by the general state of the brain, as in delirium, madness, and the like. It seems probable either that the region corresponding to the optic nerve is comparatively large, or peculiarly susceptible of impressions, or both.

9. The imagery of the eye sympathizes with the state of the stomach: the grateful impressions of opium raise up pleasing visible ideas, spasms and indigestions the contrary.

10. Our stock of visible ideas is a key to a great part of our knowledge. In poetry and painting it is a principal source of invention;

* This association is not so intimate as that between visible appearances and tangible qualities. Sensations of sight and hearing are never confounded with each other, like those of sight and touch,

in mathematics and mechanics the invention of the diagram is the solution of the problem: visible ideas assist the memory in respect to past facts, and the preservation of the order of time. Hence eye-witnesses generally relate in the order of time, without any express design of doing so.

11. By association of different circumstances the same portrait may appear more like the original to one person than to another: also by association, painters, architects, statuarys, anatomists, &c. form visible ideas with great facility, and retain them with great accuracy.

12. Fables, allegories, and the like, please and instruct on account of their visible imagery. This may be one reason why idolatry has prevailed in the world; and why systems of superstition which amuse or astonish the imagination, are more acceptable to the mass of mankind than truth and simplicity.

III. INTELLECTUAL PLEASURES AND PAINS.

The original or associated pleasures or pains of vision, excite in their respective circumstances, the grateful or ungrateful primary passions.

Visible ideas associating themselves with almost all our internal feelings, the pleasures and pains derived from this sense must constitute a principal ingredient in the most complex intellectual affections: The visible appearance of a friend, or the idea of it, excites and cherishes friendship, &c.

A relish for the beauties of nature, and a taste for the imitative arts, may in part be traced to the pleasures of this sense.

IV. AUTOMATIC MOTIONS excited by visible impressions.

These are either external, relating to the globe of the eye, the eye-lid, &c. or internal, such as the contractions of the iris or ciliar ligaments.

Light produces an irritation, and consequently excites the action of the muscles of the eye; the luminous object, acting at the same time upon each eye, produces the congruous motions of the eyes: and agreeably to this theory, if children are so laid in the cradle as that one eye shall be covered and the other exposed to the action of light, the eyes will not move congruously, that is, they will learn to squint.

V. VOLUN-

V. VOLUNTARY AND SEMIVOLUNTARY POWERS.

Adults possess a perfectly voluntary power, which children do not, of directing the optic axes to the same object.

Irritation of external objects produces at first an automatic closure of the eye-lids ; by degrees the apprehension of any external irritation, or the experience of the pleasure of moistening and cooling the eye, &c. makes this action voluntary ; and by frequent repetition it becomes secondarily automatic*.

SECTION VIII.

Sense of Hearing.

V. THE SENSE OF HEARING.

I. GENERAL DESCRIPTION OF THE ORGAN OF HEARING.

The use of the external ear is like a tunnel to gather sounds, and by its ridges and hollows to direct them to the meatus auditorius. This is a crooked passage, about an inch long and three or four lines wide, which leads

* Hartley, part i. sect. iv. prop. 60—63.

from

from the concha or hollow of the external ear to the tympanum.

The membrana tympani is a thin transparent membrane which closes the inner extremity of the meatus; behind this membrane is a cavity called the tympanum, about four lines deep and wide, and above two lines high.

Within the tympanum are four small bones called the malleolus, the incus, the stapes, and the os orbiculare, the uses of which are little known.

The Eustachian tube is a conduit leading from the tympanum to the palate; it preserves a communication between the tympanum and the external air; and probably assists the impressions of a person's own voice, and when the mouth is open of external sounds also.

At the back of the tympanum is a hole called fenestra ovalis, which opens into a cavity called the vestibulum, behind which are three semicircular pipes called the labyrinth, opening by five orifices into the vestibulum.

Another orifice of the tympanum called fenestra rotunda, covered by a fine membrane,

brane, leads to the cochlea, a cavity resembling a snail's shell; in it is a canal winding in a spiral line and divided into two parts, the upper and lower, by a thin lamina: the upper opens into the tympanum, the lower into the vestibulum.

The auditory nerve consists of two branches; the one hard, the other soft. Five branches of the *portio mollis* enter the vestibulum and form a delicate web, which sends slips to the semicircular canal; the rest of the *portio mollis* enters the cochlea, and winds with the spiral line. The *portio dura* is distributed among the external parts of the ear.

The winding of the auditory nerve through the cochlea and the labyrinth, exposes a considerable portion of it to the impression of sounds, while the narrowness of the channel prevents the pulses from being too much dilated and weakened. By this construction of the organ of hearing, those very soft sounds become audible, which *cæteris manentibus* would otherwise be lost and unheard*.

Secondly, PHENOMENA EXPLAINED.

* Keill's Anatomy, ch. iv. sect. v.

L. SENSATIONS acquired by the sense of hearing are those of SOUND only.

1. Sounds are caused by the vibrations of sonorous bodies, which, producing correspondent vibrations in the conducting medium, probably excite proportional vibrations in the auditory nerve, which, being propagated to the brain, excite the sensation of sound.

2. Air is the usual medium; but wood, metals, and even water, are good conductors of sound*.

3. The different strength of sounds depends upon the condensation of the pulses of the conducting medium: the difference in the acuteness and gravity of sounds arises from a difference in the velocity of the pulses. A musical chord vibrates with twice the velocity of another which sounds an octave below it.

4. Soft tones are originally agreeable; loud noises originally disagreeable; the former being generated by moderate, the latter by violent vibrations. But even these sometimes subside within the limits of pleasure,

* Franklin's Experiments on Electricity, &c. Lett. 44.

as in the case of those who love noisy mirth and the like.

5. Concords, that is, musical notes, the ratios of whose vibrations are sufficiently simple, are agreeable: when the ratios are less simple they are disagreeable, and are called discords. Concords are probably originally disagreeable to children, but by use fall gradually within the limits of pleasure, in proportion to the simplicity of their ratios. It confirms this supposition, that even discords in some circumstances become pleasant to an ear conversant with music.

6. Each articulate sound makes a distinct separate impression upon the auditory nerve, and excites a distinct corresponding sensation.

The ear is, perhaps, furnished with some contrivance, similar in its use to the jacks of a harpsichord, to extinguish strong sounds, and to keep up weak ones.

It is difficult at a distance to distinguish articulate sounds, numberless reflections confounding the vibrations.

7. The known vibratory nature of sounds illustrates and confirms the doctrine of vibrations in general. The various vibrations existing at the same time in the air without

interrupting each other, make it credible that a similar phenomenon may take place in the medullary substance.

8. By ASSOCIATION sounds become SIGNS.

1. Of TANGIBLE QUALITIES.

1. Of DISTANCE: sounds decreasing in a certain ratio as distances increase. This sign of distance is very incorrect, depending upon variable circumstances, such as the direction of the wind, and the original strength or acuteness of the sound, and the like.

2. Of POSITION: we judge of the position of sonorous bodies by the direction of the sound. But this rule is very inaccurate, the direction varying by reflections of surrounding bodies, and other adventitious circumstances.

Hence ventriloquists acquire the art of throwing the feigned voice to a distance, and of making it seem to come from any situation in a room*.

2. Sounds become signs of VISIBLE IDEAS.
The words sun and moon excite the visible

* Probably by indistinctness, and by not moving the lips, they make it difficult to ascertain from whence the voice issues; and by habit they give the voice the degree of intensity which it would have if it actually proceeded from the place from which it is thought to issue.

ideas

ideas of those celestial luminaries. The name of a person excites the idea of his visible appearance, and the sound of a word the visible form of the letters of which it is composed.

The action of writing is associated with the visible idea in those who spell correctly. That we sometimes write from the audible idea is plain, from the mis-spelling of a word in conformity to the pronunciation.

3. Sounds by association excite the ideas of OTHER SOUNDS, articulate or otherwise.

A few notes of a familiar melody, excite an idea of the whole.

A few prominent words in a sentence, excite the idea of the complete sentence.

Thus, in a difficult hand-writing we judge of a word by a few letters, and of a sentence by a few words.

We judge of a person's meaning by familiar acquaintance with his voice, pronunciation, gesture, and other circumstances.

Hence we easily understand a speaker to whose manner we are accustomed.

Hence, also, it is difficult to understand a stranger; also, to distinguish proper names, and articulate sounds in an unknown language.

And, hence, ventriloquists, by uttering a few sounds articulately, make themselves understood.

4. By association articulate sounds readily excite SIMPLE, COMPLEX, and DECOMPLEX IDEAS; and few complex ideas can be distinctly recollected which are not associated with names.

Hence it seems probable that deaf and dumb persons do not acquire many complex or universal ideas.

II. IDEAS generated by audible impressions.

Every separate sound generates its correspondent simple idea; but these are very evanescent.

Similar simple ideas coalesce into complex ones, and are associated with names, as the sound of a violin, a flute, a trumpet, a voice, &c.; and the words concord, discord, soft, loud, melody, harmony, music, and the like, all express complex ideas of sound.

Children learn to speak by repeating sounds which they hear: hence the audible idea is associated with the act of speaking, and is often too evanescent to excite the attention of the mind.

Ideas

Ideas of sight and hearing are the principal storehouses of the imagination, and are equally related to the imaginative arts of painting and music respectively, and also to poetry.

A technical memory, particularly adapted for retaining numbers, may be formed by the audible impressions of corresponding articulate sounds, as in Grey's *Memoria Technica*.

III. INTELLECTUAL PLEASURES AND PAINS.

The primary pleasures and pains of this sense are easily explained by association. Thus we love, desire, hope for, are delighted with, and retain a pleasing recollection of fine music: we hate, are averse to, fear, are pained by, and have a disagreeable recollection of harsh, jarring, and discordant sounds.

The pleasures of music are transferred by association to the places where, and the persons with whom we enjoy that entertainment. This is one ingredient in the attachment which many feel to a town life, to cathedral worship, &c. In like manner, the warbling of birds is one of the many causes which operate to produce delight in the spring, or love to rural life.

The pleasure of articulate sounds, like that of visible appearances, is very evanescent ; and this circumstance renders the ear as well as the eye the proper vehicle of mental information and improvement.

The love of music seems to be generated by the following process :

1. Some soft tones are originally pleasing to the ear, as some colours are grateful to the eye.

2. Some sounds originally disagreeable, subside by use within the limits of pleasure. This happens in all concords, and in some cases even in discords.

3. Some tones resemble the natural expressions of pleasure and pain ; and the latter may be so softened as to fall within the limits of the former.

4. By far the greater part of the pleasures of music arise from accidental associations. The ringing of bells has no connection with joy, nor tolling them with sorrow, but by association. Hence every country has its favourite melodies and style of music. Thus an air which is perfectly indifferent to a stranger, excites in a Swiss an irresistible desire of home.

5. The

5. The skill and ingenuity in the composition of some harmonies, excites the admiration of those who are competent to judge.

6. Extreme difficulty in the execution exciting the astonishment of the hearers, seems to constitute a principal source of the delight afforded by modern music.

IV. MOTIONS AUTOMATIC AND VOLUNTARY.

Certain automatic motions are produced within the ear, by the pulses of that medium which is the conductor of sound : but of the nature and direction of these motions we are totally ignorant.

The muscles of the external ear over which the mind might acquire a voluntary power, are restrained from action by the practice of binding down the ears of new-born children close to the head*.

* Hartley, ch. ii. sect. v. prop. 64—72.

Reid's Enquiry, ch. iv.

CHAPTER V.

OF THE INTELLECT.

SECTION I.

Of Truth and Falsehood.—Knowledge and Opinion.—Probability and Improbability.—Assent and Dissent.—Nature and Kinds of Evidence.

THE FIFTH FACULTY of the human mind is INTELLECT, or the faculty by which we judge of truth.

I. Concerning TRUTH AND FALSEHOOD.

TRUTH has respect to ideas and words.

TRUTH IN IDEAS signifies the conformity of ideas to the actual nature, existence, and state of things.

When internal feelings or perceptions are just images or symbols of external objects, and when those ideas are joined whose archetypes are joined in nature, and those ideas are separated whose archetypes are separated.

Thus

Thus the association of the ideas of God and perfection, of virtue and utility, of matter and resistance, are true combinations of ideas. In like manner, the separation of the ideas of God and tyranny, of vice and honour, of creature and independence, are cases of truth in thought.

TRUTH IN WORDS is either logical or ethical.

LOGICAL TRUTH is the expression of truth in thoughts: as in the proposition, God is good.

ETHICAL TRUTH is the conformity of the language to the conceptions of the speaker, whether those conceptions be true or false: as when a papist affirms, that transubstantiation is true.

FALSEHOOD is the reverse of truth: it has respect both to thoughts and words.

FALSEHOOD IN THOUGHTS or conceptions is called ERROR: it is joining ideas whose archetypes disagree, and separating those whose archetypes agree. The separation of justice from the idea of God, and the combination of happiness with the idea of vice, or of disgrace with virtue, are cases of mental error.

FALSEHOOD IN WORDS is either logical or ethical. Logical falsehood is the expression of mental error. Such are the propositions,

God is unjust; vice leads to happiness; virtue is dishonourable.

Ethical falsehood is the disagreement of the language with the ideas of the speaker*.

II. Concerning KNOWLEDGE and OPINION, CERTAIN and UNCERTAIN, PROBABLE and IMPROBABLE, BELIEF and DOUBT.

KNOWLEDGE is either an operation of mind, or the result of that operation.

Knowledge, in the first sense, is the clear perception of truth: I know, that is, I clearly perceive, that the whole is equal to all its parts taken together.

Knowledge, in the second sense, is the treasure of associated ideas stored up in the mind in consequence of clear perceptions, Mathematics, astronomy, ethics, history, &c. are in this sense branches of knowledge.

OPINION is the result of obscure and indeterminate perception. That the planets revolve about the sun, is a branch of knowledge; that they are inhabited by beings similar to men is only an opinion.

Knowledge is said to be CERTAIN, opinion UNCERTAIN.

* Doddridge's Lectures, No. 68.

CERTAINTY, by whatever means attained, admits of no perceptible degrees. I am equally certain that I exist, that the whole is greater than its part, and that the three angles of a triangle are equal to two right angles; one of which truths I learn by consciousness, another by intuition, and the third by demonstration.

UNCERTAINTY admits of an infinite variety of degrees between the limits of certain truth and palpable falsehood.

Of opinions, some are **PROBABLE** and others **IMPROBABLE**.

A **PROBABLE OPINION** is one the evidence of the truth of which preponderates over that of its falsehood.

AN **IMPROBABLE OPINION** is that, the evidence of whose falsehood preponderates over that of its truth.

III. **BELIEF** is the state of mind produced by the perception of probability: **UNBELIEF**, or doubt, by the perception of improbability.

Of probability there are various degrees, from a moral certainty to the slightest preponderance of evidence: and the degrees of belief are proportionably various. In like manner the degrees of improbability are in-

definitely various, from the least deviation from the equilibrium to the lowest degree upon the scale of evidence, and even to a moral impossibility. Hence degrees of doubt are proportionably various: and the mind often vibrates between belief and unbelief, as it attends most to the evidence for or against any opinion in question.

It may be observed here, that the limits of human knowledge are very contracted, and that the evidence of those principles by which human life is chiefly governed, seldom amounts to more than to a high degree of probability*.

IV. OF ASSENT and DISSENT, and of the nature and various kinds of EVIDENCE.

ASSENT is of two kinds, SPECULATIVE and PRACTICAL.

SPECULATIVE ASSENT is a readiness to affirm the truth of a proposition. SPECULATIVE DISSENT is the reverse of this.

* This is clearly the case in the choice of connections, professions, and situations in life: and even the most important doctrines of natural and revealed religion are more properly the objects of rational belief, than of certain knowledge. "We walk by faith, not by sight."

PRACTICAL

PRACTICAL ASSENT is a readiness to act in conformity to speculative principles. PRACTICAL DISSENT is the contrary.

Assent is generated by EVIDENCE.

EVIDENCE is the means of knowledge : it is the medium by which coincidences or concurrences of things or ideas are made apparent to the mind.

Of evidence there are five species : CONSCIOUSNESS, SENSE, INTUITION, REASONING, and TESTIMONY.

1. By CONSCIOUSNESS we learn our own existence, faculties, and operations.

2. By SENSE we learn the existence, properties, and powers, of external objects, and the coexistence of different attributes in the same object.

3. By INTUITION we learn the coincidences of ideas in the most simple and obvious cases. For instance, the whole is greater than its part*.

4. REASONING

* What we call intuition, is probably nothing more than the general result of the most obvious sensible observations.

Dr. Hartley observes, that "the cause that a person affirms
" the truth of the proposition, *twice two is four*, is the en-
" tire

4. **REASONING** is discovering the relation between two given ideas by the intervention of a third, v. g. the three internal angles of a triangle coincide with two right angles, because both these quantities coincide with the internal and external angle taken together.

A **SYLLOGISM** is the expression of the act of reasoning. It consists of three propositions: in the two first, called the **PREMISES**, the two given ideas are compared with the third or middle term; in the last, called the **CONCLUSION**, they are joined to or separated from each other, as they appear upon comparison to agree or disagree.

Virtue is wisdom,

Benevolence is virtue:

Therefore Benevolence is wisdom*.

5. **TESTIMONY** is the evidence by which

"the coincidence of the visible or tangible idea of twice
 "two with that of four, as impressed upon the mind by
 "various objects. We see every where that twice two
 "and four are only different names for the same impres-
 "sion: and it is mere association which appropriates the
 "word truth, its definition, or its internal feeling, to this
 "coincidence."—Hartley on Man, prop. 86, p. 192,
 quarto. See also Dr. Beddoes's Observations on Demon-
 strative Evidence.

* Duncan's Logic, part iii. ch. i.

we

we acquire the knowledge of facts and conclusions which do not fall under our own observation.

SECTION II.

Of Words and Propositions.—Use of Words for the Acquisition of Knowledge.—Different Kinds of Propositions.

I. OF WORDS AND PROPOSITIONS.

WORDS are articulate sounds used to express ideas.

All language may be resolved into NOUNS and VERBS, with their respective ABBREVIATIONS.

NOUNS express names of things: they are divided into SUBSTANTIVES, which are the principal things spoken of, and ADJECTIVES, which denote qualities or circumstances belonging to them.

VERBS express existence and its modes. They are of three kinds: such as denote simple existence, viz. to be: such as express existence in an active state, viz. to eat: and such as express existence in a passive state, viz. to be eaten.

Words which are usually represented as indeclinable particles having no determinate signification of their own, are ABBREVIATIONS of nouns or verbs invented for the greater expedition of communicating our thoughts. See this Theory of language illustrated and established in Tooke's *Diversions of Purley* *.

A PROPOSITION, is a word, or a combination of words, by which the universal or partial concurrence or coincidence of ideas, or the want of that concurrence or coincidence, is expressed: viz. Man is mortal. A circle is not a square.

A proposition in its proper form consists of three parts; the subject, the predicate, and the copula.

* Thus *if* signifies *give*: and signifies *add*: *that*, though often called a conjunction, is uniformly used as a pronoun: for instance,

He said *that if* England *and* Ireland were united they would form a powerful empire.

This sentence analysed would stand in this form;

Give England *add* Ireland united they would form a powerful empire. He said *that*.

"In this work," says Dr. Darwin, "Mr. Tooke has unfolded, by a single flash of light, the whole theory of language which had so long lain buried beneath the learned lumber of the schools."—*Zoonomia*, vol. i. p. 531.

The **SUBJECT** is the idea concerning which something is affirmed or denied; the **PREDICATE** is that which is united to or separated from the subject; the **COPULA** is an artificial sign which denotes the union or the separation of the subject and the predicate.

II. USE OF WORDS IN ACQUIRING KNOWLEDGE.

Words are not essential to the acquisition of knowledge, that is, to the perception of the agreement or disagreement of ideas, and to the states of mind corresponding therewith.

All our original impressions are very complex; many of them both of the same and of different senses being made upon the mind at once. For example: the impressions of the nurse, the chair, the fire, the nursery, &c. are made at one and the same time upon the sensorium of the child.

By observation and experience we gradually learn to separate an idea from its variable adjuncts, viz. the nurse from the furniture of the nursery, the inhabitant from the house, and the like.

The senses teach us that certain properties uniformly belong to certain substances; that

other properties never adhere to them ; and again, that some properties belong to them at some times and in some circumstances, but not in others.

Hence we gain the idea of universal or partial concurrence, or of the universal want of it.

The senses also teach us that certain ideas universally coincide, viz. the whole with all its parts ; and that in others there is a partial coincidence, viz. two is an aliquot part of ten ; and lastly, that in others there is no coincidence whatever, viz. in black and white.

Thus it appears that we might acquire very distinct ideas of a great variety of concurrences and coincidences of objects, if language had no existence*.

Words are acquired long after ideas are impressed, and are an artificial contrivance to assist the operations of the intellect, and to fa-

* Hence it follows that deaf and dumb persons are capable of reasoning, and of acquiring knowledge ; but not so easily or accurately as those who can use articulate sounds as the signs of universal ideas, unless they happen to discover some other artificial contrivance for the same purpose.

cilitate the acquisition and the communication of knowledge.

Words facilitate reasoning, and assist the operations of the intellect, chiefly as being the signs of universal ideas, and of their various modes and combinations.

III. DIFFERENT KINDS OF PROPOSITIONS.

Propositions are distinguished,

1. INTO AFFIRMATIVE AND NEGATIVE.

An **AFFIRMATIVE PROPOSITION** connects the predicate with the subject, viz. God is good.

A **NEGATIVE PROPOSITION** separates the predicate from the subject, viz. God is not a tyrant.

2. UNIVERSAL AND PARTICULAR.

A **UNIVERSAL PROPOSITION** is that, the subject of which is a universal idea ; and the predicate extends to the whole subject, viz. All that are virtuous will be happy.

A **PARTICULAR PROPOSITION** is that, the subject of which is a universal idea, and the predicate is limited to a part of the subject, viz. Some princes are benefactors to mankind.

As every proposition is either affirmative or negative, and also either universal or par-

ticular, all propositions are distinguished into four classes, Universal Affirmative, Universal Negative, Particular Affirmative, and Particular Negative.

SINGULAR PROPOSITIONS, or those the subject of which is a singular idea, are reckoned in the class of Universals, because the predicate is connected with the whole subject, viz. Sir Isaac Newton invented fluxions.

The same may be observed of COLLECTIVE PROPOSITIONS, the subjects of which are collective ideas, viz. The English are a commercial people.

3. PROPOSITIONS ARE TRUE OR FALSE,

A TRUE PROPOSITION unites ideas that agree, or separates those which disagree.

A FALSE PROPOSITION affirms an agreement between ideas which disagree, or a disagreement between those which agree.

SECTION III.

Origin of Assent to various Classes of Propositions.—Remarks.

1. SOME propositions express the COINCIDENCE of the subject and the predicate.
Such

Such are the propositions in arithmetic and geometry, and equations in algebra.

1. In SIMPLE cases of this kind ASSENT is produced by the perception of coincidences in things themselves, or in distinct sensible ideas, viz. Two and three are equal to five.

2. COMPLEX propositions of this sort are proved by DEMONSTRATION.

DEMONSTRATION is a succession of propositions, beginning with self-evident and advancing to remote truths, in which every proposition is intuitively connected with the preceding, till in the end the conclusion itself becomes intuitive*.

Demon-

* The most perfect specimen of the progress of the human mind in the acquisition of knowledge is to be found in mathematics. Mathematicians begin with clear and accurate Definitions of their terms, to which they rigidly adhere. From definitions they advance to self-evident propositions, some of which are speculative, and are called Axioms; others are practical, and are called Postulates. They next proceed to the demonstration of remoter truths, of which the speculative are called Theorems; the practical, Problems. Thus, from easy intuitive principles they advance by regular gradations to remote and complex truths, till they ultimately arrive at propositions so far distant from the primary elements of knowledge, that a priori they might be thought to be beyond

Demonstrative and even mathematical reasoning is ultimately resolvable into intuitive, that is, as Dr. Beddoes has proved in the work before referred to, into the most obvious sensible propositions.

3. In general, in complex cases the perceived coincidence of words, or other symbols, produces speculative or rational assent*.

4. This

the limits of the human intellect; such, for instance, as the demonstration of the laws which regulate the motions of the celestial bodies. To demonstrations mathematicians sometimes prefix Lemmas, which are propositions, the truth of which must be established previous to the main proposition; and they sometimes subjoin Corollaries, which are intuitive inferences from demonstrated truths; and Scholia, which are observations illustrative of the subject.

The want of ideas sufficiently definite, is the reason why mathematical evidence cannot be applied to morals, metaphysics, and other branches of science, with so much success as to quantity and number: but the more nearly we can approximate to this mode of reasoning by clearness of definition, accuracy of expression, and close connected argument, the more satisfactory will be our conclusions, and the less obnoxious will they be to cavils and objections.—Duncan's Logic, book ii. ch. vi. Locke's Essay, book iv. ch. iv. sect. vi, vii.

* N. B. Perceived coincidences of words and symbols are a just foundation for rational assent; for they always suppose

4. This assent is also produced by the recollection that the proposition was once proved to be true, though the steps of the demonstration are now forgotten.

5. Assent is produced indirectly by the authority of other persons in whose knowledge and veracity we confide.

6. Practical assent is effected by annexing ideas of utility, convenience, necessity, and the like, to speculative truths.

II. Propositions which express the CONCURRENCES of ideas, or the properties of things, are distinguished into Vulgar and Scientific.

suppose coincidences of ideas, and may be resolved into ideas which sensibly coincide with each other. $12 \times 12 = 144$ is a coincidence of the numeral figures which are used as symbols of the numbers on each side of the equation: Twelve times twelve is equal to a hundred and forty-four, is a coincidence of words: and twelve times twelve counters reckoned one by one, would be seen, and felt, to coincide exactly with 144 counters reckoned in the same manner.

Assent to propositions in any numeral ratio is generated by the same means; that is, by perceiving the coincidences of the ideas or symbols, viz. A is equal to half B; B is supposed to be equally divided, and A to coincide with one of the parts,

I. VULGAR

1. **VULGAR PROPOSITIONS** assert the most obvious properties of sensible objects, such as, Milk is white, a dog barks, &c. To such propositions common observation produces assent.

2. **SCIENTIFIC PROPOSITIONS** suppose the definition of a thing by its most obvious properties, and assert another property or power as a constant associate. Thus, Gold is soluble in aqua regia.

ASSENT to these propositions is produced by observation and experiment, united with a supposition drawn from innumerable observations of ourselves and others, that in natural substances wherever three or four of the principal properties are found, the other properties are uniformly associated with them.

PRACTICAL ASSENT in these instances is produced by associations of convenience, utility, and the like.

This is sometimes greater than the speculative assent will warrant: for example, a medicine is sometimes pronounced infallible which has produced one or two cures.

Sometimes the practical assent is much less than the speculative ought to produce. Thus the practice of temperance is not so universal

as the conviction of its utility would require.

III. ASSENT to the truth of propositions which assert PAST FACTS is produced by Memory and Testimony.

A lively and distinct recollection, &c. is the associate of truth in the remembrance of past facts, and generates assent*.

Sagacity, integrity, attention, &c. in the witnesses, are the associates of truth in testimony, and the ground of assent to historical facts.

IV. ASSENT to propositions concerning FUTURE EVENTS rests upon EXPERIENCE and ANALOGY.

Whatever is, or has been, was once future, and repeated observation that similar events have uniformly succeeded to similar previous circumstances, naturally generates an expectation that the like will happen in any future time: in other words, Similar consequences are inseparably associated in the mind with

* Probably because vivid perceptions are the constant associates of actual sensations: but the evidence of memory, though generally and justly relied upon, is not invariably correct, as will be hereafter observed.

similar

similar previous circumstances. The invariable regularity of the course of nature excites the expectation when the sun sets, that he will rise again. This does not indeed demonstrate the truth of the proposition, that the sun will rise, but it generates an assent which the most obstinate sceptic cannot withhold.

REMARKS.

1. RATIONAL and practical assent do not always coincide with respect to their object, and still less in their degree: yet they have a reciprocal influence upon, and tendency to produce, each other. The common language of human frailty, "*Video meliora proboque, deteriora sequor,*" is a proof of a disagreement between the rational and practical assent. Also the prejudices of vicious men against, and of virtuous minds in favour of, the truth of divine revelation, are instances of the great influence of the practical over the rational assent.

2. As ASSENT is produced by the perception of the concurrence or coincidence of ideas, or symbols, so DOUBT is produced by observing the want of a *uniform* concurrence

or

or coincidence; and DISSENT, by perceiving the total absence of this agreement of ideas or signs. Practical dissent is produced by associating ideas of difficulty, pain, ridicule, and the like.

3. Original sensible impressions are very complicated, and produce automatic motions, which, by association, gradually become voluntary; and these actions are often in correspondence with some general principle, as though that principle had been laid down as an axiom to govern the conduct; such as, The whole is greater than its part; I exist; The objects of perception have a real existence, &c.

But no person can properly be said to believe, that is, to assent to any proposition as true, till upon comparison he discerns the concurrence or coincidence of the ideas, or of their symbols. Thus, brutes cannot be said to *believe* even their own existence: and it is a long time before children can with propriety be said to believe any thing. It often happens that men grow up to maturity, and even pass their whole lives, without giving an explicit assent to many propositions, which nevertheless in all their conduct they seem to take for granted, such as the existence

ence of a material world, or the law of association: for the ideas composing these propositions have never been compared, nor their coincidence observed. Nor is it necessary to mental operations that men should be acquainted with the structure of their minds, any more than it is to corporeal operations that they should understand the structure of their muscles, though the knowledge of the former is of essential service to the philosopher, as skill in the latter is to the anatomist.

4. Internal feelings, and different states of mind, are objects of perception equally with external objects. Whatever excites attention to them, whether it be the pleasure or pain accompanying them, or any external suggestion, such as books, conversation, or the like, will produce in the mind corresponding sensations and ideas, which ideas may by association become very complex, and being connected with words and symbols may be the subjects of judgment and reasoning, equally with external objects. These ideas Mr. Locke calls ideas of reflection, though in fact nothing more than very complex ideas of sensation.

5. It

5. It is plain that words, or symbols of some kind, are absolutely necessary to the process of reasoning, and the improvement of science. Actual coincidences of ideas are perceptible only in the simplest cases even in mathematics and arithmetic, the clearest and simplest of all sciences. Words capable of definitions are soon substituted for visible ideas, and signs for words; and the agreement of the signs or words infers the agreement of the things signified. Thus, names are the exponents of numbers, figures of names; and, in algebra, letters are the exponents of figures, and also of geometrical quantities, the mutual coincidences or disagreements of which infer the coincidences or disagreements of the correspondent numbers or quantities. In fact, in common language all universal terms are used like algebraic symbols, not conveying any distinct visible idea, but standing in a known relative situation to the other terms; by which means a train of reasoning is carried on, till in the last step of the process, by recurring to the definitions, the conclusion becomes distinct and intelligible*.

SECTION

* Dr. Hartley has given many excellent rules for ascertaining

SECTION IV.

Concerning innate Ideas and Principles.—The Evidence of the Senses.—Existence of the Material World.

ALL our original IDEAS are the result of sensible impressions: we have no reason to suppose any of them to be INNATE.

States of mind produced by association of ideas are objects of perception, and, being perceived, become the source of a new set of ideas, which Mr. Locke calls ideas of re-

ascertaining the value of evidence, whether dependent or independent, and some beautiful illustrations of the probability of general conclusions formed by induction and analogy, and of the various methods of arriving at these general conclusions: he has also exemplified the application of these principles to the sciences of philology, mathematics, logic, natural history, civil history, natural philosophy, and theology. The whole of what he has advanced upon these subjects is very curious, and highly interesting to all who are desirous of tracing the progress of the human intellect in the acquisition and improvement of knowledge.—Hartley on Man, part i. ch. iii. sect. iii. prop. 86, 87, 88. Priestley against Reid, &c. Introd. page 1—9. Berkeley's Principles, Introd. sect. vi—xx. Locke's Essay, book i. ch. ii.

flection; and Dr. Hartley, more properly, complex ideas of sensation.

These are the true sources of ideas; they are known to exist, and they are sufficient to account for all the phenomena of the mind: to suppose any other source of ideas, therefore, is unreasonable and unphilosophical.

PROPOSITIONS being nothing more than expressions of the coincidences or concurrences of ideas, or of the want of such coincidences or concurrences, cannot possibly be INNATE, unless both ideas and words are innate.

Every proposition is easily distinguishable by the evidence upon which assent to it is founded: whether consciousness, sense, intuition, reasoning, or testimony. Hence it would be easy to distinguish innate propositions from others; but no such distinction can be made, nor any catalogue formed.

Innate propositions would be universal, and would carry irresistible conviction; but some of the most important truths, and those which have the fairest claim to be regarded as innate, have to multitudes been unknown, and by many have been disputed and denied*.

That the SAME QUALITIES in external

* Locke's Essay, b. I. ch. ii—iv.

objects produce the SAME SENSATIONS in different persons, is, by those who attend to the question, generally admitted. The Scotch philosophy pleads that the belief of this fact is instinctive. The difficulty occurs only to a few speculative minds, and the question does not admit of experimental solution; but the truth of the proposition is assumed, upon the general principle, that similar causes in similar circumstances, will produce similar effects, upon similar objects similarly situated: and we have never seen reason to suspect a fallacy in the application of this principle to the present case, though the whole of our language and conduct is formed upon the assumption of the fact.

Philosophic Theists have generally admitted that sensations are the effect of a divine energy immediately exerted upon the mind: upon these principles it has been asked, what evidence have we of the existence of external objects, and what the use of the MATERIAL WORLD?

The Scotch philosophy again refers us to instinctive conviction, a doctrine already sufficiently exploded*.

* Reid's *Inq. into the Human Mind*, ch. v. sect. vii.

BISHOP BERKELEY contends, that the material world is an useless incumbrance, and that the Deity excites sensations without the intervention of a material archetype*.

This hypothesis must be allowed to be possible. But, if it be admitted, we have no evi-

* "As to what is said of the absolute existence of unthinking things, without any relation to their being perceived, that seems perfectly unintelligible. Their *esse*, is *percipi*. Nor is it possible they should have any existence out of the minds or thinking things which perceive them.

"It is an opinion *strangely* prevalent amongst men, that houses, mountains, rivers, and, in a word, all sensible objects have an existence, natural or real, distinct from their being perceived by the understanding. But with how great assurance soever these principles may be received in the world, whoever shall call it in question may perceive it to involve a manifest contradiction."—Berkeley, page 38, &c.

"To what purpose is it," says Dr. Reid, "for philosophy to decide against common sense, in this or any other matter? The belief of a material world is older and of more authority than any principles of philosophy. It declines the tribunal of reason, and laughs at all the artillery of the logician."—Reid's Inq. page 105.

That sensations themselves should exist out of the mind perceiving them is indeed a contradiction; but the existence of external objects as the means of exciting sensations, is no contradiction; and this is all that Berkeley's opponents contend for.

dence of the existence of any beings in the universe, but the Deity and ourselves. All that we see, or perceive by the senses, and every person with whom we converse, are mere entia rationis, having no real existence: and for the loss of these it is a poor compensation, that we may infer from the benevolence of God, that there are in the universe other solitary individuals like ourselves, subject to the same illusive impressions.

The existence of an external world is not often made the subject of inquiry, and cannot therefore be called the proper object of belief or disbelief. To those who speculate upon the subject, the supposition of the real existence of external objects commonly appears more pleasing in itself, and therefore more agreeable to divine benevolence, than to suppose that we are subjected to a perpetual illusion; and no case has ever occurred which can lay a foundation for doubting the truth of this conclusion*.

* Berkeley's Principles and Dialogues.

Beattie on the Immutability of Truth, part ii. ch. ii. sect. ii.

Priestley against Beattie, sect. iii.

Reid on the Intellectual Powers, essay ii. ch. xi, xii.

CHAPTER VI.

OF MEMORY.

SECTION I.

Phænomena of Memory.

MEMORY is defined by Hartley, to be that faculty by which, traces of sensations or ideas recur, or are recalled, in the same order or proportion, accurately or nearly as they were originally presented.

The principal PHENOMENA OF MEMORY are the following :

1. A vast stock of ideas is treasured up in the memory, which it easily produces upon a variety of occasions, either by voluntary or involuntary recollection.

2. The rudiments of memory are laid in the perpetual recurrency of the same impressions or clusters of impressions. These being fixed in the mind and frequently recurring, facilitate the recollection of new impressions, which either consist of the old clusters va-

riously diversified, or of new ones in some way or other connected and associated with them. Barbarous and unconnected words are difficult to be remembered, because they are associated with no former impressions; but new facts in any art or science are with great ease remembered by those who are conversant with that art or science, because they are readily combined with what they knew before.

3. Ideas of recollection are distinguished from sensations, chiefly by a difference in the vividness of the impressions*, and by the associates which accompany them. The parts of old impressions are strongly cemented together, and readily suggest each other; which is not the case with new ones.

4. Ideas of memory are distinguished from reveries, chiefly by the readiness and strength of the associations by which they are cemented together. Hence recollections of recollections are sometimes mistaken for recollections of facts; which is frequently the case with old people. Also, recollections of nar-

* When from disease, or any cause, ideas become as vivid as sensations, they are mistaken for sensations, as in phrensy.

rations are by degrees mistaken for recollections of facts, and that even when they are in part at least unfounded in truth, and originally known to be so. Persons of lively imaginations, who accustom themselves to embellish facts with fictitious circumstances, are often known to relate a story till they are incapable of distinguishing the real facts from the ornamental circumstances, and believe the whole to be true. Hence it follows, that we are to judge of the credit due to memory by experience, and not, as the Scotch philosophy teaches, by instinct*.

Recol-

* Dr. Reid describes memory as an original faculty of which we can give no account, but that we are so made. "I believe most firmly, says he, what I distinctly remember: but I can give no reason for this belief. It is the inspiration of the Almighty that gives this understanding. This belief (page 305) is no less certain than if grounded on demonstration; no man in his wits calls it in question, or will hear any argument against it." This, surely, is neither the language of philosophy, nor of truth. How often is it found, notwithstanding this "inspiration," that men are under an error with respect to facts which they most distinctly remember, or (which is the same thing) which they *think* that they remember? For, if the internal feeling of recollection is the same, to deny that to be memory

Recollected ideas are also distinguished from reveries by their connection with known facts, and by various methods of reasoning.

5. Memory depends entirely or chiefly upon the state of the brain. Diseases, concussions of the brain, and spirituous liquors, impair it; and it generally returns again with the return of health*.

6. Memory differs at different ages. Children soon learn and soon forget: old people learn with difficulty, and remember best what they learned when young. This is agreeable to the theory of vibrations: the softness of the brain in children disposes it after it has received impressions to return soon to its original

memory which is incorrect in respect to fact, is perfectly gratuitous. It is true, you cannot easily persuade men that they are mistaken in what they believe that they distinctly recollect; but this is no proof that memory is infallible.—Reid on the Intellectual Powers, essay iii. sect. i, ii.

* What that affection of the brain is, which by the constitution of human nature causes memory, we cannot absolutely ascertain. The hypothesis of vibrations, which has been already explained, is the most probable. It is arising to object, that if the existence of impressions upon the brain could be proved, memory would remain as unaccountable as before: all which this hypothesis pretends to,

ginal state: and the callosity of the brain in old people fixes associations already formed, and indisposes it to the reception of others. Also, the memory of children must be imperfect, as they are deficient in those clusters of the most usual impressions which constitute the elements of memory, and in the knowledge of words and other symbols.

7. Sensations attended with great pleasure or pain, make a deep impression upon the memory, owing probably to the vigorous vibrations which they excite.

8. Sensible ideas gradually decay in the memory, if not refreshed by new sensations.

9. Voluntary recollection is performed by calling up associated ideas, which by degrees introduce the idea in question. But where the desire is too eager it has a contrary effect. If I want to recollect the name of a person, I

to, is to advance a step in tracing the process of the connection between external objects and mental feelings. It is curious to observe, that Dr. Reid, after starting several objections against the commonly received hypotheses, is obliged to admit (page 341.) that "many well-known facts lead us to conclude, that a certain constitution or state of the brain is necessary to memory."—Reid on the Intellectual Powers, page 338—342.

call up the visible idea of the person, or some other associated circumstance : this commonly introduces the name : and the same in other cases.

10. Some persons of weak judgments have retentive memories. Where this extraordinary memory consists only in a correct recollection of a multitude of ideas or words for a short time, the introduction of new ideas may perhaps obliterate the old. There are limits beyond which the two powers of receiving and retaining ideas cannot consist with each other.

11. Memory is a faculty incessantly exercised while thought continues ; nor is the mind ever wholly deprived of it, though it is often much impaired.

12. The excellence of memory consists partly in its strength of retention, partly in the quickness of recollection.

13. All the faculties of the mind are dependent on the memory : and though some persons may have strong memories with weak judgments, no person can have a strong judgment whose memory is remarkably defective*.

14. Memory

* Professor Dugald Stewart has advanced some very ingenious

14. Memory is a source of refined and permanent pleasure: painful recollections gradually subside within the limits of pleasure:

ingenious and judicious observations on the difference between a casual and a philosophical memory. "The bulk of mankind," he observes, "associate their ideas chiefly according to the most obvious relations, such as resemblance and analogy, and, above all, according to the casual relations arising from contiguity of time and place: whereas in the mind of a philosopher ideas are associated according to the relations of cause and effect, or of premises and conclusion. The advantage is greatly in favour of the philosopher; the arrangement he uses strengthens his memory, assists his invention, enables him to reason synthetically, and to correct his intellectual defects: but this kind of memory is not favourable to conversation. The man of casual memory is open to every impression, and readily accommodates his ideas to any circumstance which may occur. But the philosopher who thinks closely and reasons systematically is deficient in ease and quickness, and is in danger of becoming tedious by long discourses. And as nothing appears weaker or more absurd than a theory partially stated, it frequently happens, that men of ingenuity, by attempting it, sink in the vulgar apprehension, below the level of ordinary understandings."—Stewart on the Intellectual Powers, page 411—417. Locke's Essay, book ii. ch. x. Hartley on Man, part i. ch. iii, sect. iv. prop. 90. Doddridge's Lectures, prop. viii. Reid on Intellect. Powers, essay iii. ch. i. ii. vii. Stewart, Elem. of Mind, ch. vi. sect. i. ii. viii.

and

and if time sufficient be allowed, by the power of association all pain will be ultimately absorbed, and the pleasures of memory will be pure and unmixed with misery*.

The memory is a faculty of the greatest importance, and deserving the most careful and assiduous cultivation. The natural means of improving it are attention and exercise, frequent reviews, and conversation. Many artificial contrivances have been invented to assist the memory, some account of which may be found in the references below†.

The design of Grey's *Memoria Technica* is to facilitate the recollection of numbers by substituting letters for figures, forming them into technical words, and then throwing them into a sort of barbarous verse. This contrivance is particularly applicable to dates, weights, and measures, and in general to all cases in which numbers are concerned‡.

* Rogers's *Pleasures of Memory*.

† Watts's *Improvement of the Mind*, part i, ch. 17.

Rollin's *Belles Lettres*, vol. i. page 277—280.

Stewart, *ibid*, ch. vi. sect. 3—7.

‡ Dr. Priestley's *Lectures on History*, vol. i. page 278.

Dugald Stewart, *ibid*. page 453—456.

SECTION II.

Of Succession and Duration.

A SUCCESSION of sensations and ideas is continually passing through the mind, during the state of vigilance, the knowledge of which we attain by consciousness.

The IDEA OF SUCCESSION is acquired by reflecting upon this train of ideas, and from no other source : for real successions existing without us excite the idea of succession, only so far as they excite a succession of sensations*.

Succession is not MOTION : for though all motion is successive, yet all motions do not excite the idea of succession : and real successions of ideas might exist in the mind of a sentient being, independent of all external successions.

The VELOCITY of the succession of ideas in the SAME PERSON, is different at different times. This is evident from the capacity we

* Locke's Essay, book ii. ch. xiv. sect. iv.

possess,

possess, of distinctly perceiving different velocities in the successions of external objects, which are only discerned by the changes they produce in the velocities of the corresponding sensations.

This VARIATION in the velocity of the succession of sensations and ideas, is sometimes VOLUNTARY and sometimes INVOLUNTARY. The velocity of sensations must always correspond with that of the external impressions. That of ideas depends very much upon the state of the body: they seem to succeed to each other with greater rapidity in the evening than in the morning; in youth than in age; in health than in sickness; when a person is in good spirits, than when he is under mental depression. Phrensy and delirium accelerate the train of ideas, and stupor retards them. The course of ideas appears likewise, in some degree, obedient to voluntary efforts.

The variation in the velocity of these successions hath certain LIMITS. Some external successions are too RAPID to excite sensations; such, for instance, are the motion of light, electricity, and sound. Other successions are too SLOW and subtle to be the objects of perception,

ception, as the motion of the shadow upon the dial.

Of IDEAS, we cannot with the utmost effort retain any one in the mind beyond a very short time, nor can we call up any given number of ideas in a given time.

Upon the whole it is highly probable, that in health the succession of ideas, like that of the pulse, is nearly EQUABLE: otherwise the idea of duration, which depends upon the succession of ideas, would not be equable.

It is not at all improbable that the velocity of the succession of ideas of DIFFERENT PERSONS, may vary much more considerably than that of the same person at different times. This is agreeable to the analogy of human nature, in which great variety is blended, with general uniformity, and seems to be confirmed by the variety which is apparent in the mental improvement of different persons who possess equal advantages and are equally industrious*.

DURATION, as applied to any finite being, signifies continued successive existence.

* Locke's Essay, book ii. ch. xix. sect. vi—xiv.

The IDEA OF DURATION is acquired from reflecting upon the succession of our ideas.

While the succession of ideas continues we are conscious of the continuance of existence : when that succession is suspended or forgotten, as in sleep, or deliquium, or trance, the consciousness of existence and the idea of duration is proportionably interrupted. Also, any portion of duration appears longer or shorter in exact proportion to the number of ideas which are recollected in a given interval*.

While we ourselves continue to exist, we perceive that other beings, whether similar or dissimilar to ourselves, also continue in existence. Hence we transfer the idea of duration, and even of successive duration, to them and to all other beings that exist ; and duration becomes a MEASURE common to universal existence.

As the succession of ideas is, properly speaking, the exponent of duration, so that what is predicated of one may be predicated

* See a remarkable case of suspended consciousness, and the consequent suspension of the idea of duration, in Beattie's Essay on Truth, page 84, note.

of the other, it is plain that, strictly speaking, there can be no duration where there is no succession of ideas: and that when successive duration is applied to inanimate objects, it must be in an improper sense; and with reference to the perceptions of some being whose ideas are successive.

Hence it follows, that ABSOLUTE DURATION has no real existence in nature: it is nothing more than the abstract idea of succession applied to that of existence.

The reason why the idea of duration seems to force itself upon the intellect, is, that in the human mind the succession of ideas, and consequently the idea of succession, can never be separated from conscious existence.

Duration is either LIMITED or UNLIMITED. Limited duration is TIME, unlimited is ETERNITY. Time often signifies the period between the creation and the dissolution of the world. An *ÆRA* is a remarkable event from which time is reckoned. An *EPOCH* or PERIOD is the number of years comprehended between one æra and another.

Duration, like space, can only be MEASURED by itself; but it wants an advantage which extension possesses, and which arises

same number of years, and die on the same day, yet the duration of one may be double to that of the other, if twice the number of ideas should have passed through his mind in the course of his life.

3. That an Omnipotent Being, by increasing the velocity of the succession of ideas, may cause the same revolution of the celestial bodies, which appears as a day to one, to appear as more than a thousand years to another.

4. That if a being in all other respects constituted like ourselves, should have all his ideas at once present to his mind, without any succession, he could form no conception of successive duration.

5. That to an all-perfect mind, all whose ideas are equally, invariably, and at all times present, the attribute of successive duration can with no propriety be ascribed.

6. The ingenious speculation of the late Soame Jenyns seems not altogether destitute of plausibility, viz. that the true distinction between time and eternity is, that the former is successive duration, the latter duration perpetually instantaneous, and that one bears no more relation to the other than the sensation of colour

colour to that of sound. That a being whose duration is temporary, can form no more idea of a duration perpetually instantaneous, than a blind man can judge of light. That all existence which we are acquainted with, is successive, and therefore temporary, but that existence after death is eternal, that is, perpetually instantaneous. And this hypothesis, according to that author, relieves many difficulties relating to the mode of the divine existence, the rewards and punishments of a future life, and the like, which arise from confounding a temporary and fleeting, with an eternal and permanent state of being*.

SECTION III.

Existence of Space.

SPACE is TANGIBLE EXTENSION, that is, extension of three dimensions, as distin-

* Locke's Essay, book ii. ch. xiv.

Soame Jenyns's Disquisitions, essay iv.

Freethinker, vol. iii. No. 114.

Spectator, vol. ii. No. 94.

Reid on the Intellectual Powers, essay iii. ch. iii. v.

Price's Rev. of Difficulties in Morals, p. 30—32.

Doddridge's Lectures, No. 10.

guished from visible extension, which has only two.

The IDEA of space is simple, and it is gained by the sense of TOUCH only; for that sense alone is capable of receiving notices of extension of three dimensions.

It has been debated, whether ABSOLUTE SPACE is a REAL BEING, existing externally, and independently of the mind; or, whether it be any thing more than the ABSTRACT IDEA of extension, or the absence of all being.

In favour of the REAL EXISTENCE of absolute space, it has been argued :

1. That the name is positive, and consequently that the object has a positive existence.

2. That the existence of space forces itself upon the mind; so that it cannot be annihilated even in thought*.

3. That it possesses positive properties, viz. length, breadth, depth, eternity, immutability, immensity, unity.

* Intellectual Physics, sect. v. page 59.

Correspondence of Dr. Price and Dr. Priestley, pages 68, 103, 105, 348.

On the **NEGATIVE** side of the question, it is urged :

1. That the arguments for the real existence of space, if they prove any thing, prove too much. Upon the same principles, darkness, which all allow to be nothing more than the absence of light, might be proved to have a positive existence, for it is expressed by a positive term ; its existence forces itself upon the mind, and it has positive properties like space, viz. length, breadth, depth, figure, eternity, &c. But these, when properly considered, appear to be only negations of positive attributes*.

2. Space

* The very intelligent author of a late profound treatise, entitled *Intellectual Physics*, whose zeal for the true faith in this mysterious point has led him to denounce the advocates for the contrary opinion as "*Philosophic Sectaries*," in reply to this analogical objection to the positive existence of space, observes, page 61 : "Darkness, this mere privation, is removed by the return of light, and silence by the return of sound : but is space removed, or can it be supposed to be removed, by the return of the existence of body ?" But with all due respect to this worthy champion of metaphysical orthodoxy, I cannot but conceive that vacuum is as much removed by the return of plenum, nothing by the return of something, or, which is

2. SPACE either expresses the relation of distance, or the property of extension, or absolute void.

If space is used to express DISTANCE, it is a relative idea, which implies the existence and comparison of at least two separate objects. In this sense it can have no independent existence.

If space signifies EXTENSION, it implies the existence of an extended subject, and can

the same thing, space by the return of matter, as darkness is excluded by the introduction of light, and silence by the return of sound.

The respectable writer adds, page 62 : " That instead of annihilating space by the existence of body, that portion of absolute space which the body occupies is called *the place* in which it is." But here he again falls into a mistake : it is very seldom, if ever, that the word place is used for the portion of absolute space occupied by a given body ; it almost uniformly signifies the situation of a body, in respect to other bodies with which it may be compared. A chess man is in the same place if it occupies the same square on the board, though the board be removed from the table ; the table is in the same place if it occupies the same part of the cabin, though the ship may have sailed a hundred leagues : and the ship is in the same place if it lies in the same harbour, though the earth may have moved a hundred million miles in her orbit.—Locke's Essay, book ii. ch. xiii. sect. 7—9.

have

have no being distinct from the substance of which it is a mode.

If space signifies **ABSOLUTE VOID**, the idea expressed by it is necessarily negative, implying the absence of all being: real existence is therefore excluded.

FIGURE is **LIMITED EXTENSION**: but this does not prove the existence of absolute space. The walls of a room inclose space to which dimensions are applied: but this no more proves the existence of a positive being of which figure is a mode, than the conical figure of the earth's shadow proves that darkness is a positive being. In one case the figure is, properly speaking, the termination of the wall, in the other the termination of the solar rays.

To affirm that space is eternal, immense, immutable, and the like, is only saying that nothing has neither beginning, nor end, nor limit, nor change, nor number.

The reason why the idea of space forces itself upon the mind, when we endeavour to exclude all ideas of existing objects, seems to be, that it is absolutely impossible in a state of vigilance to divest the mind wholly of its ideas; and extension being the property of all
all

all external objects, and therefore the most familiar of all our ideas, is that which most naturally occurs. At any rate we cannot argue the real existence of any thing from our inability to divest ourselves of the idea of it.

No one who is even superficially versed in logic, can seriously argue the positive existence of an object from its having a positive name. Notwithstanding, such is the influence of language upon our ideas, that without great caution we are very liable to be misled by words, and to believe that where names are positive, corresponding ideas are so too. The ideas annexed to the terms death, darkness, silence, &c. are generally but erroneously supposed to be positive: and a similar error seems to have given rise to the controversy concerning the existence of space.

The question, whether space has a real existence, though apparently trivial, has been thought by some to be of great importance, as lying at the foundation of what is called the demonstration a priori, of the existence and attributes of God. The advocates for this argument assume as a principle, the real and necessary existence of space and duration:

but

but as these are not substances, they must be modes. Therefore, there is One Supreme Being, of whom eternity, immensity, independence, and immutability, are the essential attributes; that is, there is a God who is the necessary subject of all possible perfections. But the fallacy of this reasoning is sufficiently apparent from the preceding observations*.

SECTION IV.

Concerning Identity.

IDENTITY is a simple idea which cannot be defined.

Identity is an idea which arises from comparing an object with itself: as that of diversity arises from comparing it with some other

* Locke's Essay, book ii. ch. xiii.

Colliber's Inquiry, page 261—263.

Watts's Essays, No. 1.

Clarke at Boyle's Lect. page 16, 17, 39, 40, octavo.

Jackson on the Existence and Unity of God.

Law's Inquiry into Space and Time.

Waterland upon Law, page 14—16.

Clarke and Leibnitz, sect. 4, 5, 13, 52, 53.

Doddridge's Lectures, page 89, 92.

Intellectual Physics, sect. 6, page 73.

object.

object. Thus, similarity is an idea which is gained by the comparison of similar; and equality, by that of equal objects. Strictly speaking, indeed, an object cannot be compared with itself: but the present impression is compared with the recollected idea of the object acquired by a preceding perception.

THE IDEA OF IDENTITY is perfectly CLEAR and DISTINCT, and many controversies which have been agitated upon this subject in the schools, appear to have been little more than disputes concerning the proper application of the term. For example, whether the ship which the Athenians sent annually to Delos, in the time of Demetrius Phalereus, was the same with that which conveyed Theseus, above five hundred years before? whether the oak of a hundred years standing be the same with the plant of a year's growth? whether Methuselah, at the age of nine hundred years, was the same as the infant eight days old? and the like. The question here seems to be nothing more than, whether the term identity may be applied with propriety to an object which, though in some respects the same, is in most circumstances different*.

* Beattie on Truth, part i. ch. ii. sect. iii.

The word identity is sometimes used in a lax and popular, and sometimes in a strict and philosophical sense.

In a **POPULAR SENSE** identity is predicated of those things in which there is no perceptible alteration, or in which the change is very slow and gradual. Identity, in the **PHILOSOPHICAL SENSE**, is perfect sameness without any change whatever.

It has been questioned by philosophers, whether **PERFECT IDENTITY**, that is, existence continued without any change, can be predicated of any created being.

It has been said that we have no **PROPER EVIDENCE** of the identity of any being. An object seen to-day is supposed to be the same with what we saw yesterday, because the present impression is similar to the recollected one. But the most exact similarity would not prove identity; much less can this be argued from a general resemblance, in which there will always be found a great variety in the associated circumstances.

But it may be replied, that the permanent identity of the object in a diversity of circumstances, is a hypothesis which accounts
more

more simply, and therefore more probably, for the general similarity of the impressions, than the supposition of a new and distinct object for every distinct impression.

It is further urged, that the PROPERTIES of all known substances are variable; but we know nothing of substances but from their properties; hence it is reasonable to conclude, that all substances are likewise variable.

IN INANIMATE SUBSTANCES compositions and decompositions are continually taking place, by the action of the atmosphere, of heat, and of various principles and powers, known and unknown, which sometimes rapidly, and sometimes by a slow and gradual process, produce radical changes in the structure even of the most durable of natural bodies, such as gold and gems.

IN VEGETABLE AND ANIMAL SUBSTANCES, continual accessions are made by nutriment, and diminutions by insensible perspiration, &c.; the component particles are continually changing, the organization fluctuates, and consequently life and perception, which depend upon the animal structure, are likewise in a continual flux.

THE

THE HUMAN BODY undergoes changes similar to those of other animals: it passes by insensible degrees from infancy to youth, to mature age, to advancing and declining years, to old age, decrepitude, and death. And some have conjectured, that in the space of fourteen years the whole system of particles undergoes a total change,

The SENTIENT PRINCIPLE in man, whatever be its metaphysical nature, keeps pace with the changes of the corporeal system: the intellectual powers successively spring up, and in proportion to the cultivation bestowed upon them they gradually advance to maturity, and commonly decline as the body, and particularly the brain, decays; so that there is as great a difference in the mental powers, as there is in the personal appearance of the infant, the man, and the dotard.

The fair conclusion therefore is, that ALL SUBSTANCES which fall under our cognizance are variable; and that permanent identity cannot be predicated of any created being.

An important question arises upon this subject, WHAT CONSTITUTES PERSONAL IDENTITY? what makes a human being
the

the same conscious individual accountable SELF, through every period of life, and every vicissitude of body and mind?

That we are through life the same intelligent accountable beings, is a fact which we know by consciousness; and whether we will or no, we must accept of this evidence*. The only question is, What are the circumstances which constitute identity of person, amidst all the changes of body and mind which a man undergoes in the course of a long life? If any hypothesis which may be proposed for the solution of this problem be insufficient, it does not follow that there is no such thing as personal identity, but merely that the hypothesis in question is unsatisfactory and untrue.

Dr. Watts advanced the ingenious supposition, that personal identity consists in the union of the same immaterial spirit to a body, which, though in many respects variable,

* In this view the assertion of Dr. Reid, though somewhat harsh, may perhaps be justified: "The conviction which every man has of his identity, as far back as his memory reaches, needs no aid of philosophy to strengthen it: and no philosophy can weaken it without first producing some degree of insanity."—Reid on the Intellectual Powers, page 315.

possesses certain permanent stamina which in all changes remain the same, and never become the stamina of other bodies. The objection to this hypothesis is, that it wants proof, and is not favoured by natural phenomena.

Mr. Locke contended that identity of consciousness constitutes identity of person. It was objected by Dr. Watts, that upon this hypothesis, transferred consciousness would transfer personality. But this supposition is, perhaps, impossible. A madman may imagine himself an emperor; but imagination is not consciousness. Bishop Butler observes, that consciousness is a property presupposing, and proving, the existence and identity of substance. Collins and Cooper contend, that consciousness is a property existing in succession, and that no consciousness existing at different times can be numerically the same.

Some have supposed that personal identity consists in the identity of the immaterial spirit, whether it be, or be not united to the same system of matter. But to wave for the present the question concerning the existence of an immaterial soul, it may justly be objected that all we know of mind, viz.

M

thought,

thought, habit, affection, intellect, memory, will, and the like, are as variable as any properties of matter : from attributes so mutable, therefore, the immutability or permanent identity of the thinking principle cannot surely be inferred.

The author of *Intellectual Physics** maintains, that we have a distinct and clear consciousness that identity of person is formed by the union of the two substances body and mind, and that this union produces a strict unity which cannot be divided even in thought: the sentient being is by nature, and in nature, an atom, a monad. God, who made me an unit, may divide my unity into its original parts, and thus annihilate me as a thinking being ; but no power in nature can divide what he has thus made one†.

Mr. Cooper argues, that identity is not a property even of man as an intelligent being ; and he thinks that upon this hypothesis the

* Supposed to be Governor Pownall.

† Perhaps the observation which this author makes upon an expression of Dr. H. More may be applied to his own account of identity and unity: " This is ingenious ; yet it " is but the shadow of an idea."---*Intellectual Physics*, sect. iv. page 55.

christian doctrine of the resurrection is cleared of many difficulties ; that the moral government of God, and the production of the greatest sum of happiness, may be effected by the transfer of habits, feelings and associations, to successive substances and organizations, and that the interest of virtue will be sufficiently supported by the interest which every existing being must feel in the welfare of the being who is to succeed him, and whose happiness or misery will result from the habits and associations that will be transferred to him.

If Mr. Cooper's hypothesis were generally admitted and acted upon, it would be very injurious to the cause of virtue : for few would be encouraged to virtue, or deterred from vice, if they had no interest in the reward or punishment consequent upon their moral conduct. But men are so much the creatures of habit, that the most extravagant opinions seldom produce any considerable change in their conduct. And in the present case, the conviction of permanent identity, however acquired, is so firmly fixed in the mind that it is impossible to root it out.

Upon the whole, whether we can, or cannot distinctly analyse personal identity, the

consciousness of every individual is to himself a sufficient ground for admitting the fact. Whether the system of habits and feelings, to which the word SELF is applied, be connected with one mass of matter or another, is of little consequence. But if any require that the same system of particles should be always connected with the same system of feelings, in order to constitute identity of person, Dr. Watts's hypothesis of permanent stamina, which, if not actually proved, has never been disproved, affords a proof of the possibility of permanent identity in this sense of the word, which may satisfy the most scrupulous materialist, and the most captious sceptic.

The same hypothesis likewise establishes the possibility of a resurrection after death; a resurrection not only of the same conscious self, but even of the same body, that is, of the same stamina, if that should be thought necessary to constitute personal identity, which, however, cannot be proved. And upon the whole; till it can be clearly shown in what personal identity consists, it can never be proved that the resurrection of the same person is an absurdity or impossibility. This therefore is a doctrine which, being contradictory

to no phenomenon of human nature, is capable of being established by sufficient authority.

It has been asked, whether, if a substance be annihilated, it can, by omnipotence, be reproduced: and the negative of the question has generally been assumed as a self-evident principle. "A being in all respects similar may be created, but the same being cannot again be brought into existence." But why not? Why should it be more difficult to reproduce the same being, than to produce one similar? "We cannot conceive how it is possible." But can we conceive of creation in any form? "Identity, it is said, is *"continued existence."* But this is begging the question. "No being," says Dr. Reid, page 337, "can have two beginnings of existence." But this is merely a verbal objection. It may have a beginning, and a renovation. The usual appeal is made to "common sense." But that is open to both parties. Let a contradiction be proved, and the point must be given up: till then, a renovation of existence ought not to be assumed by philosophers as a thing impossible.

Hence it follows, that if, as some philosophers have maintained, the whole man is "destroyed by death," a resurrection, even upon this supposition, cannot be proved impossible: much less if destruction means nothing more than the disorganization of a material system, no particle of which is annihilated*.

SECTION V.

Whether Consciousness be ever interrupted.

THAT in a state of vigilance thought continues without any intermission, is a fact which admits of no dispute. But whether CONSCIOUSNESS be not altogether SUSPENDED during profound sleep, deliquium, or trance, has been the subject of eager debate.

THAT CONSCIOUSNESS in these cases is sus-

* Locke's Essay, book ii. ch. xxvii. sect. 9. 27.

Watts's Essays, No. xii. sect. 7.

Doddridge's Lect. No. xii.

Butler's Analogy, diff. i. page 439—450.

Reid on Intellectual Powers, essay iii. ch. iv. vi.

Cooper's Tracts, page 305—465.

Adventurer, No. 88. vol. 3.

PENDED, is argued from the total want of recollection of the ideas which, in such states, are supposed to have passed through the mind.

From the ABSOLUTE INSENSIBILITY to the lapse of duration.

From the USELESSNESS OF THOUGHT in a state in which it is never remembered.

From the CASE OF INFANTS, who sleep much, who have few ideas, and who cannot be supposed to be always thinking.

And from the PHENOMENA OF SLEEP, in approaching to which we appear to approach to insensibility*.

That thought CONTINUES without any intermission, is argued from the active nature of the soul, of which thought constitutes the very ESSENCE. This, though an argument upon which the Cartesian philosophers lay great stress, is evidently begging the question.

It is further urged, that we often think when we do not RECOLLECT our thoughts: the language and emotions of persons in profound sleep, often prove to by-standers that they are dreaming, when in the morning the dream is

* Locke's Essay, book ii. ch. i. sect. 10. 23.

forgotten; and dreams are sometimes not recollected, till some accidental occurrence afterwards brings them to mind. It seems reasonable therefore to conclude, that thought is never intermitted, though it may be often forgotten.

The possibility of the hypothesis of uninterrupted consciousness must be allowed; but this will not prove that it is either true, or probable. Dreaming seems to be an approach to vigilance, and dreaming-sleep is not sound sleep. A person asleep, whose external emotions discover that he is dreaming, if he were awaked at the time, would probably recollect his dream, though a sounder sleep afterwards may have effaced it from his memory.

It has been asked, If thought be intermitted, how can it be recovered? The answer is, that sleep is not a voluntary, but a mechanical effect. And the converse of that affection of the brain which produces sleep and insensibility, may produce vigilance and thought.

That we approach to incogitation as we approach to sleep, is denied by the advocates for uninterrupted consciousness. And they contend that thought without intermission may constitute a necessary part of a wise general

neral plan, though we may not in every instance discern its utility.

Upon the whole, the materialists, and those philosophers who maintain that animal organization, and a sound state of the body is necessary to the operations of the mind, have generally admitted the hypothesis of the occasional suspension of thought. The Cartesians, who contend that thought is the essence of the soul, and the philosophers, who maintain that the immaterial spirit can perceive and act better in a state of separation from the body than in conjunction with it, have universally pleaded for the uninterrupted consciousness of the human mind*.

* Watts's Essays, No. v.

Baxter on the Soul, vol. i. page 330—346.

Doddridge's Lectures, prop. xii. No. 13.

CHAPTER VII.

OF THE IMAGINATION*.

SECTION I.

*Phænomena of Imagination.—Reveries.—
Dreams.*

IMAGINATION is the faculty to which we ascribe the recurrence of ideas in a vivid manner, without regard to the order of past impressions.

All ideas are the result either of new impressions, or of association with preceding ideas, though the connection cannot in every instance be immediately traced out.

In a **REVERIE**, a person being more attentive to his own thoughts than to external objects, more of his ideas are deducible from association, and fewer from external impressions.

* The two first sections of this chapter are chiefly abridged from Hartley.

DREAMS are the imaginations or reveries of a sleeping man. These are deducible, First, From impressions lately received ; Secondly, From the state of the body, and particularly of the stomach and brain ; and, Thirdly, From association. This is evident from the frequent recurrence of impressions of the preceding day, from the dreams of sick persons, and from experience. Concerning dreams it may be observed :

1. That the scenes which present themselves are mistaken for real. This is owing, First, To the exclusion of real impressions with which they may be compared. Secondly, To the increased vividness in the trains of visible ideas, to whatever cause that phenomenon may be owing.

2. Dreams are wild and inconsistent. For the brain is in a very different state from that of vigilance ; and vibrations of the stomach, pleasant or otherwise, being propagated to the brain, produce successions of ideas, dependent indeed upon association, but very different from those which would take place in a state of vigilance.

3. We take no notice of, and are not offended at, these inconsistencies ; for those
asso-

associations which should lead us to take notice of them, are as it were asleep: and bodily causes hurry us into new trains successively. But if the state of the brain be such as to favour ideas of anxiety and perplexity, the apparent inconsistencies give great uneasiness.

4. Persons often appear to be transferred to different places by a kind of sailing or flying motion. This is owing to the change of magnitude and position of visible images, such as would be effected by a change of distance. But if there are no ideas corresponding with the impressions of walking, we appear to ourselves to fly, or ride.

When persons walk and talk in their sleep, the vibrations descend into the motory muscles: at the same time the brain is oppressed, and they have no memory. Similar to this is the case of a person reading inattentively, and forgetting every thing immediately*.

5. Dreams consist chiefly of visible imagery: for vivid impressions are made perpetually

* See a remarkable case of somnambulancy in Doddsley's Annual Register for 1760, part ii. page 72.

upon the optic nerve during vigilance. Visible scenes are made up of the fragments of the visible images lately impressed. These scenes are sometimes repeated again and again, and by repetition coalesce.

6. Many of the things presented in dreams appear to be remembered by us and familiar to us, because of the readiness with which they succeed each other in the fancy.

7. Dreams are soon forgotten, because of their incoherence, and of the change which takes place in the brain in passing from sleep to vigilance.

8. Dreams presented in the first part of the night, are more confused and irregular than morning dreams : for in the first case we approach to sleep, in the latter to vigilance.

9. Many prophecies were communicated in dreams and trances, and the descriptions of them bear a striking resemblance to the phenomena of dreams, which Dr. Hartley regards as a considerable internal proof of their genuineness and credibility.

10. Dreams are useful by interrupting and breaking accidental associations, which might by continuance be so closely cemented that nothing

174 IMPERFECTIONS OF INTELLECT.

nothing could disjoin them ; which would be madness.

11. A person may form a judgment of his health and temperance by the pleasantness or unpleasantness of his dreams, and likewise learn some useful hints relating to the strength of the passions*.

SECTION II.

Of Imperfections in the rational Faculties.

THE several CASES of imperfection of the rational faculties are,

I. ERRO-

* Andrew Baxter attempts to account for the phenomena of dreams by the influence of spirits of an inferior order, whose employment it is to sport at such times with the human fancy ; a hypothesis too fanciful and arbitrary to merit serious examination.—Baxter on the Soul, ch. x.

Professor Dugald Stewart supposes that during sleep the influence of the will is suspended, and that the phenomena of dreams are produced by the succession of our thoughts in sleep, regulated by the same laws of association to which it is subjected while we are awake. The professor does not seem to be aware, or perhaps is not willing to admit, that volition itself has been proved by Dr. Hartley to be a case of association, and the necessary
result

1. **ERRONEOUSNESS OF JUDGMENT** in children and idiots.

In such persons the memory is fallacious, judgment weak, affections disproportionate to the object, and connecting consciousness is imperfect. The disposition of the brain is such, as either not to receive, or not to retain miniature vibrations.

2. **DOTAGE** of old persons.

In this case the memory is imperfect; things present are mistaken for others; discourse is foreign to the objects presented to them. The brain in such persons may be decayed, or wasted, the sinuses distended, and the fine vessels obstructed, &c.

3. **DRUNKENNESS.**

Agreeable impressions upon the stomach produce corresponding effects upon the brain, and dispose to cheerfulness. When too long continued, or in too great a degree, they enter the limits of pain, and pass into the disagreeable vibrations belonging to anger, jealousy,

result of previous circumstances, which therefore may and actually does occur in dreaming like any other mental phenomenon.—Stewart's Elements of the Philosophy of the Human Mind, ch. v. part i. sect. 5. Hartley on Man, part i. ch. iii. sect. 5.

and

176 DELIRIUM, NARROWNESS OF MIND.

and the like. Confused vibrations propagated from the stomach into the brain, produce corresponding confusion in the ideas and voluntary motions. Vinous particles absorbed into the system must distend the blood in the veins and sinuses, compress the medullary substance, and dispose to sleep, or to a paralytic affection of the nervous system.

4. DELIRIUM.

This is owing to the disagreeable state into which the whole nervous system is brought by bodily disorder, which often particularly affects the optic nerves, and produces vivid trains of visible images, forcing themselves upon the patient's eye. Discourse becomes incoherent by being accommodated to this incoherent train of ideas, and not expressing even this adequately, because of the general disordered state of the brain.

5. FREQUENT RECURRENCY of the same ideas.

This happens when a person applies closely and long to any particular subject, and is little conversant with other branches of knowledge; the ideas become vivid; the associated vibrations peculiarly vigorous; the mind is contracted; every thing belonging to the favourite

VIOLENT PASSIONS, MELANCHOLY. 177

yourite subject is magnified, every other subject is lessened and thought meanly of, and the perpetual recurrence of the same vibrations in the same parts of the brain irritates the medullary substance, and produces fear, anxiety, peevishness, and the like. Sleep, and change of studies, by breaking these associations, tend to cure this narrowmindedness and the disorders flowing from it: but above all, a rational and close attention to religion and virtue, the objects of which are of the highest importance, and have a direct tendency to enlarge and improve the mind, and to correct all misapprehensions of the relative importance of inferior pursuits.

6. VIOLENT PASSIONS.

These produce disorder in the understanding, by magnifying and exciting unnatural associations amongst those ideas which are the objects of the prevailing passion, and preventing or obscuring those associations which lead to right apprehensions of facts. Hence all violent passions are temporary madnesses.

7. MELANCHOLY.

This rises from intemperance, want of due bodily labour, injuries done to the brain, too

N

much

much application to the same subject, ^{or} violent and long continued passions, profuse evacuations, and hereditary disposition, or an undue make of the brain.

Irritability of the medullary substance is the immediate cause of melancholy: hence such persons are easily pleased, or provoked, often disposed to laughter upon trifling occasions, and are very fickle and changeable.

When such persons endeavour to gratify very absurd desires, or lose connecting consciousness, or violate the rules of decency and virtue, this distemper passes into madness.

8. MADNESS.

Mad persons differ from others in judging wrong of past and future events and facts; their affections and actions are violent, being different from those of other persons upon like occasions, and contrary to their true happiness; their memory is fallacious, their discourse incoherent, and they lose in a great measure their connecting consciousness.

The causes of madness are either bodily or mental.

That which arises from bodily causes is related to drunkenness, or delirium; that which
rises

rites from mental causes is similar to the effects of violent passions, and narrowmindedness. These two causes are generally united.

Mad persons often speak rationally upon all subjects unconnected with the immediate occasion of their insanity ; that is, one part of the brain only is disordered, and the vibrations and ideas connected with it are magnified, the rest remaining nearly the same.

Memory is often impaired in madness, which is a bad prognostic. If a new state of body and mind can be early introduced before unnatural associations are too much cemented, madness may be cured ; otherwise not.

In dissections after madness the brain appears dry, and the blood-vessels much distended.

In maniacs the vibrations belonging to the external organs are defective : they take little food, the animal secretions are inconsiderable, and they attend but little to external impressions. Violent vibrations sometimes descending into the motory nerves give great muscular strength ; but maniacs are often sluggish, from the prevalence of ideal vibrations, like persons in a reverie.

The best preservatives from madness are religious considerations, and virtuous conduct, which excite a steady and continually increasing hope; bodily labour, variety of mental occupations, and considerable abstemiousness*.

SECTION III.

Phenomena of Brutes analogous to the Faculties of the Human Mind.—Percipieny of Vegetables.

FIRST, The principal points of RESEMBLANCE between the faculties of brutes and those of men, are the following :

1. Brutes possess a power of PERCEPTION by the medium of corporeal organs: and some of their senses, particularly those of sight, and smell, and probably of taste, in many animals, appear to be more acute than the correspondent senses in the human species.

2. Brutes have MEMORY; they retain sensible impressions; and in some cases they seem to possess voluntary recollection. Thus, birds

* Hartley, part i. ch. iii. sect. 6.

perfect themselves by exercise, in tunes which they have imperfectly learned.

3. The power of ASSOCIATION OF IDEAS in a manner similar, but in a degree inferior, to that which exists in men.

Sensations are associated with ideas and with muscular motions. "The ox knoweth his owner." The appearance of the person who feeds the cattle at the regular hour, excites attention, desire, and pleasing expectation. The sound of the lash or the touch of the spur excites motion in the horse, and the voice of the master rouses the activity of the dog.

By the influence of association animals are taught useful habits; horses to carry and to draw; dogs to watch, to point, to turn spits, &c.

By the same means brutes are taught to perform tricks: dogs learn to dance; horses, and even pigs, to spell, and the like.

By the power of association, brutes acquire cunning and skill by experience. An old hound can be more depended upon than a puppy; and an old horse will draw with more ease than a young one; and, if he is not watched, will save himself, and leave his

younger and inexperienced companion an undue proportion of labour. Also in new and unusual circumstances, an old animal will, from experience, know how to adapt itself to the situation better than a young one.

4. Animals form VOLITIONS, and execute them by correspondent MUSCULAR MOTIONS.

The dog wills to bark, to bite, to fawn; the cow to give, or to withhold her milk; the horse to neigh, to walk, to gallop: and in each case the action appears to correspond with the volition, as regularly as in mankind.

5. Brutes are impressed with PASSIONS; such as joy, sorrow, fear, hope, anger, gratitude, and shame*.

6. They possess INSTINCTIVE principles in a greater variety and in a higher degree than men. These will be the subject of future consideration.

SECONDLY, Brutes are DISSIMILAR and greatly inferior to men.

1. As they have few or no GENERAL IDEAS†, most if not all their ideas are resemblances

* Guardian, vol. ii. No. 139.

† Mr. Locke denies that brutes have any abstract ideas whatever,

blances or symbols of particular objects. Hence they have no general expressions of ideas ; and though they will reason in a low degree, as far as their ideas go, they seem utterly incapable of all general and abstract reasoning*.

2. Brutes have a very limited power of receiving or communicating ideas by SIGNS and ARTICULATE SOUNDS. That brute animals have sounds and symbols by which they express in a very intelligible manner their feelings of hunger, joy, pain, fear, and the like ; and that they have a perfect understanding of certain articulate sounds or tones, or other SIGNS, by which attention is to be roused, or fear, or hope, or pleasure excited, is obvious to all who are in the least degree conversant with them. But these symbols are very few.

It has been doubted whether those animals, parrots, for instance, which are capable of forming articulate sounds, can use them as

whatever, and thinks that this power is the chief distinction between man and brutes. This seems to be incorrect. A shepherd's cur must have a general idea of a sheep, and a pointer of a partridge, to be able to distinguish those animals from all others.

* Locke's Essay, book ii. ch. xi. sect. 10, 11.

Proced. of Underst. page 188, 189.

signs of their ideas. But as they possess in some degree the power of association, there seems to be no reason why they should not associate their feelings with articulate, as well as inarticulate sounds; but rather the contrary: and experience seems to bear testimony to the fact. A singular instance of this, related by Sir W. Temple, of the parrot shown to Prince Maurice, in Brazil, is quoted by Mr. Locke*.

3. Brutes appear to have no consciousness of **IDENTITY**, and no capacity to compare themselves with themselves in different situations: they have no sense of **RELIGION**, no idea of God, no expectation of a future life, and little or no capacity for looking forward into futurity.

Dr. Hartley thinks that brutes are a compound of instinct, of observation, and imitation: that the former of these has exerted its whole influence when the creature has arrived at maturity, but that their intellectual acquisitions from observation and imitation continue through life†.

* Locke's Essay, book ii. ch. xxvii. sect. 8.

† Hartley, page 245, quarto.

Doddridge's Lectures, No. iii. page 7.

Hume's Essays, vol. ii. sect. 9.

Cartesias, to avoid the consequence that brutes have immaterial and immortal souls, contends that they are mere impercipient machines, moved by the animal spirits as an automaton by its springs.

But the phenomena of brutes lead us by analogy to a different conclusion: indeed the evidence of the percipiency of brutes is equal to that of the sentient powers of human beings. Nor will it be allowed without proof that immateriality necessarily follows from percipiency, much less that immortality is the invariable consequence of immateriality. But if it were, why may not brutes be both immaterial and immortal*?

To account for the inferiority of the faculties of brutes to those of men, Dr. Hartley observes,

1. That it may arise from the small proportionate size of the brain, and particularly of the region occupied by the optic and auditory nerves, which are the chief sources of intellectual ideas.

* Des Cartes de Method. sect. 8. page 34—36.

Le Clerc's Phys. Lect. iv. ch. xii. sect. 9—13.

Brown's Proceed. of Underst. page 170—174.

2. From

2. From the imperfection of the matter of their brain, which being more callous than that of men, the young of brutes receive and retain ideas more easily than infants, but sooner lose the power of acquiring new ones.

3. From their want of words and such like symbols.

4. From the instinctive powers which they bring into the world with them, or which rise up from internal causes as they advance to adult age.

5. From the difference between the external impressions made upon the brute creation and upon mankind; the greater number and variety of impressions on the human mind necessarily generating greater powers of intellect and extent of knowledge.

He concludes with observing, "That we seem to be in the place of God to them, to be his vicegerents, and empowered to receive homage from them in his name: and we are obliged by the same tenure to be their guardians and benefactors*."

That VEGETABLES possess some, though

* Hartley on Man, part i. ch. iii. sect. vii. prop. 93.

probably

probably a small degree of PERCIPIENCY, has been argued,

1. From their possessing a principle of life, from their organical structure, from the circulation of their fluids, from their muscular motion, and from the phenomena of their respiration and perspiration.

2. From the distinction of sexes in vegetables, and from the mode of their propagation.

3. The state of vegetables in the night and through the winter is analogous to the sleep of animals. The vital functions are in a degree suspended.

4. Vegetables, like animals, seek after their proper pabulum ; they are nourished by wholesome, and injured by unwholesome food ; and, like animals, they are susceptible of health and vigour, and liable to disease and death.

There are in vegetables few if any appearances of voluntary effort, and none of locomotion ; but this is no proof that they are destitute of perception ; the strongest objection against the percipency of vegetables, is the want of an organical substance analogous to the brain ; but this perhaps may be discovered

discovered by future and more accurate observation*.

* This question of the percipency of vegetables, and even of minerals, is discussed with great ingenuity by bishop Watson—*Chemical Essays*, vol. v. page 128—175. See also Redi de *Generat. Insect.* pages 245—249, and 257—260.—Edwards *Exercit.* No. 8, 2d fin.—Priestley's *Abridgement of Hartley*, *Introd.* page xx.

CHAPTER VIII.

CONCERNING THE AFFECTIONS, NATURAL
AND ACQUIRED.

AFFECTIONS are MODIFICATIONS OF PLEASURE AND PAIN; by them we are excited to pursue happiness and all its means, and to flee from misery and all its apparent causes.

Affections are either NATURAL or ACQUIRED. NATURAL affections are called INSTINCTS; ACQUIRED affections are generated by certain impressions and associations.

SECTION 1.

Concerning Instincts.

INSTINCT is a natural propensity to the performance of certain actions, and is usually understood to be accompanied with a natural knowledge of the manner in which the action is to be performed.

The

The existence of this principle in brutes, and that in a very high degree, is allowed almost universally: and instinct is observed to lead them to those actions which are most necessary to their own preservation, and to the continuance of the species.

Dr. Darwin has endeavoured to prove, that what is called instinct in brutes, is the effect of imitation, instruction, and experience. His facts are curious, and his reasonings are ingenious and plausible. He has at least proved that instinct is not always uniform; and that it is modified by circumstances. He has also shown great sagacity in analysing the natural symbols of the affections; fear, grief, pleasure, and the like; and without natural signs, as he observes after Dr. Reid, no artificial ones could be invented or understood*.

All actions to which animals are impelled by instinct, are performed with so much readiness and assiduity, that it seems reasonable to believe they are attended with pleasure, though some of them are effected with great labour. Such is the instinct by which a bird

* Darwin's *Zoonomia*, vol. i. sec. xvi.

builds its nest, and that by which the bee constructs the honey-comb.

Instinct, as far as it goes, excels reason ; but it is limited to few objects, and is incapable of much variety, or of considerable improvement. Hence it is that brutes do not profit, like rational beings, by the wisdom and experience of former generations.

To account for the instincts of brutes, Dr. Hartley conjectures, that from their bodily make, certain vibrations spring up in them at certain seasons of the year, and at certain ages, mixing themselves with their acquired ideas, so as may best direct them to provide for and to preserve themselves and their young. This he calls a kind of natural inspiration, as proceeding from the same stated laws of matter and motion, as the other phenomena of nature*.

This is a gratuitous and unsatisfactory hypothesis ; and Dr. Hartley acknowledges the extreme difficulty of the subject. Could Dr. Darwin's theory be established, it would harmonize much more satisfactorily with that of the association of ideas, and with the hypothesis of vibrations.

* Hartley, page 244, quarto.

In addition to the facts mentioned by Dr. Darwin in the section above referred to, remarkable instances of the wonderful power of instinct may be seen in the references below, viz. in the bee *, the ant †, the wasp ‡, the beaver §, and the termites ¶.

The natural appetites of the human species are generally regarded as instinctive, but perhaps improperly. The sensation of hunger is produced by a certain state of the stomach, and is no more innate than the sensation of colour or sound. The suction of an infant when applied to the breast, is not the result of a previous knowledge of the action to be performed, which would imply an innate idea, but is excited automatically by the impressions made upon the nervous and muscular system, which is then extremely irritable. And by degrees mastication and deglutition, which were originally automatic, become voluntary acts. The origin of the other desires, and actions, which are commonly thought

* Nature Displayed, vol. i. page 168—202.

† Guardian, vol. ii. No. 156, 157.

‡ Nature Displayed, part i. page 126—148.

§ —————, part ii. page 106—114.

¶ Philosophical Transactions, vol. 71. page 139—193.

instinctive, admits of a similar explanation*.

The uniformity and universality of these feelings is no proof that they are instinctive: similarity of natural constitution and of external circumstances sufficiently account for these facts.

The error of those philosophers who trace all the affections of human nature, and the phenomena of mind, to instinctive principles, has been already stated and obviated.

SECTION II.

Habit.

HABIT is an inclination to a given action, accompanied with a facility and expertness in the performance of it, generated by frequent repetition.

Habit is a term which may be applied to all actions which are secondarily automatic, such as walking, speaking, deglutition, and the like. But it is usually restricted to those actions which are peculiar to some individuals,

* Hartley, prop. 40. 41. 73.

and which are performed at regular intervals, such as drinking tea or wine, smoking tobacco, or taking snuff; it is also applied to music, dancing, and playing at cards, frequenting the theatre, or going to church, and to many other cases: all subject to the same law of association by which motions, originally voluntary, become secondarily automatic.

If the existence of natural instincts be admitted, habit may be distinguished from instinct by the following particulars. Instinct is natural, habit is acquired. Instinct is a universal principle, extending to all individuals of the same species: habit is limited to those only who are placed in particular circumstances, and exposed to certain impressions. Instinct is universally of a useful tendency; habit is often useless, and even injurious, though the tendency in human nature to the acquisition of habits is capable of being directed to the most beneficial purposes. Lastly, instinctive actions are constantly accompanied with pleasure; habitual actions are often perfectly mechanical and unperceived by the agent, though the omission of them would be productive of a considerable degree of pain.

The

The principal PHENOMENA OF HABIT are reducible to the following facts :

1. An action to become habitual is at first attended with a low degree of pleasure, and often even with a sensation of considerable pain. Taking snuff, smoking tobacco, and drinking fermented or distilled liquors, are not originally pleasing. Men are influenced to begin such habits by some other motive than the gratification of the senses, such as regard to health, the love of company, emulation, and the like.

2. The speediest and surest method of acquiring a habit, is by the repetition of the action at regular and moderate intervals. A rapid succession in a very short time, or a very slow succession through a considerable length of time, or an irregular succession of actions in any time, will not produce the habit. In the first case, the organs would grow weary, the vibrations would not have time to fix, pain would be excited, and disgust would follow. In the second, the tendency to vibrate in a particular direction would be lost before a second impulse was given. In the third case, the associations would want that regular connection which is necessary to constitute fixed habit.

3. The frequent regular repetition of an action produces facility and dexterity in the performance of it. By the law of association the actions gradually cling to and generate each other, without the intervention of the voluntary power.

4. Associated circumstances never fail to excite the habitual inclination to the performance of the action at the regular time. The removal of the table-cloth and the appearance of the bottle excite the desire of wine; the return of the season reminds the sportsman of his dogs and gun, the fine lady of her routs and parties, and the school-boy of his skates and snow-balls. Hence it follows, that if the associated circumstances are interrupted the desire is not excited, at least in so great a degree. And this consideration leads to the best and indeed the only effectual means of breaking off inconvenient or bad habits, namely, by resolutely changing the associated circumstances, flying from seducing company, altering the course of life, and the like.

5. A person often suffers more from the denial of a factitious inclination than from resisting a natural appetite. But the pleasure
arising

arising from the indulgence of a habit is associated with a greater variety of circumstances, and is therefore more moderate, and more permanent, than the gratification of an instinctive feeling, which, however exquisite, is of very limited duration.

6. The progress of the pleasure of gratification, and of the pain of denial, in the case of habits, is far from bearing an exact, or at least an obvious ratio to each other.

The action which becomes habitual is perhaps originally in a slight degree painful. By repetition the pain gradually diminishes, and the uneasy sensations subside within the limits of pleasure. But by degrees this pleasure vanishes, and the action is associated with ideas or sensations which are scarcely perceptible, and becomes secondarily automatic; so that it is performed without any consciousness of the operation.

The progress of the pain of denial is very different. It advances with the pleasure of gratification till this rises to its highest degree, it continues increasing while this declines, and is then strongest and most insupportable when the pleasure of gratification is

totally lost, and the action is performed without any exertion of the will. The truth of this observation is apparent in the common habits of smoking tobacco, and of taking snuff, and even in the odious custom of dram-drinking; and it will be found to be equally applicable to habits of the most important practical tendency.

In this state an habitual affection is said to be disinterested, because it has no further end in view than its own immediate gratification, or the removal of the present pain. When it has advanced to this stage, habit has attained its highest degree, and cannot without the utmost difficulty be opposed or changed. Moral habits, when they are thus formed and matured, constitute the perfection, either of the virtuous or the vicious character. Disinterested benevolence is the highest eminence of virtue, disinterested malignity the lowest stage of vice.

That the pain of denial should increase while the sensible pleasure of the habit diminishes, and even after it is become almost imperceptible, may be explained thus. The simple sensible pleasure of the action constitutes

tutes a very small part of the actual gratification. The pleasurable feelings which have accompanied the progress of the habit, having associated themselves with the persons, places, actions, and other circumstances which have been the usual adjuncts of the situation in which the habit has been contracted, have thus, as it were, transferred a lustre to those objects, which totally disappears when the habit is interrupted. The student cannot relish his author, nor the disputant his argument, if he is denied the accustomed indulgence of his pipe : nor can the convivial man enjoy the company, or the conversation of his friends, if the bottle does not circulate with the usual freedom. Thus by the power of association the real pleasure of the gratification of habit is in exact proportion to the pain of want, though the immediate sensible pleasure may be lost.

7. Men fall insensibly under the power of habit : and it is often remarked that the influence of habit is most conspicuous, and even irresistible, where the subject of it is least aware of his bondage, and is most forward in boasting of his liberty.

8. Most if not all the affections which have usually been regarded as instinctive or natural, will be found upon attentive examination to be acquired: and the progress of the most important moral habits is exactly similar to that of the most common and frivolous of the acquired affections. The analysis of these will be pursued in a subsequent section*.

SECTION III.

Of Wit.

WIT, being a species of intellectual habit, may, not improperly, be treated of in this place.

Dryden defines wit, to be "a propriety of words and thoughts adapted to the subject." Upon which Addison remarks, that "if this be a true definition of wit, then Euclid was

* Hartley on Man, prop. 21. 77.

Darwin's Zoonomia, vol. i. sect. 17.

Lord Kames's Elements of Criticism, vol. ii. ch. 14, Preceptor, vol. ii. page 516—526.

Dr. Priestley's Sermon on the Danger of Bad Habits.

Search's (Abraham Tucker's) Light of Nature Pursued, vol. ii. part ii. ch. xxi. sect. 19.

"the

" the greatest wit that ever set pen to paper :
 " for it is certain there never was a greater
 " propriety of words and thoughts adapted to
 " the subject, than what that author has made
 " use of in his Elements, I shall only ap-
 " peal to the reader," continues this author,
 " whether this definition agrees with any
 " notion he has of wit. If it be a true one,
 " then I am sure that Mr. Dryden was not
 " only a better poet, but a greater wit than
 " Cowley, and Virgil a much more facetious
 " man than either Ovid, or Martial. It is not
 " so properly a definition of wit, as of fine
 " writing."

Pope says, that " Wit is that which has
 " been often thought, but never before so hap-
 " pily expressed." " This," says Dr. John-
 " son, " is undoubtedly erroneous ; he de-
 " presses it below its natural dignity, and re-
 " duces it from strength of thought to hap-
 " piness of language."

Addison, in those admirable essays in the
 Spectator, in which he both illustrates and
 exemplifies this delicate subject, coincides with
 Locke, who represents wit as " consisting in
 " putting those ideas together with quickness
 " and variety, wherein can be found any re-

“ semblance or congruity, thereby to make up
 “ pleasant pictures, and agreeable visions to
 “ the fancy.” To this Addison adds, “ That
 “ it is not every resemblance of ideas that we
 “ call wit, unless it gives delight and surprise :
 “ for instance, when a poet tells us that the
 “ bosom of his mistress is as white as snow,
 “ this is not wit ; but when he adds, with a
 “ sigh, that it is as cold too, it then grows
 “ into wit.”

Cowley has written an ode describing wit by its contraries : this Dr. Johnson declares, “ both as a description, and as an example of
 “ wit, is without a rival.” “ Wit,” says Dr. Johnson, “ is that which is at once both natural and new, that, which though not obvious, is at its first production allowed to be
 “ just : it is that, which he that never found
 “ wonders how he missed.”

“ But,” adds he, “ abstracted from its effect upon the reader, wit may be more rigorously and philosophically considered as a
 “ kind of concordia discors, a combination of
 “ dissimilar images, or discovery of occult resemblances in things apparently unlike.”

Lord Kames observes that “ Wit is a quality either of thoughts or words.

“ Wit

“ Wit in thoughts is an agreeable, uncommon, and somewhat ludicrous assemblage of “ ideas.” “ True wit,” says Lord Chesterfield, “ never yet made any person laugh, “ though it never fails to produce a smile.”

This observation is not perfectly correct. Lively unexpected sallies of genuine wit in conversation seldom fail to excite a laugh : but wit in composition does not often produce this effect ; it excites a pleasing sensation, similar, but much superior to that which produces laughter.

Wit in words is a ludicrous turn depending solely upon the ambiguity of language : it is far inferior to wit in thoughts, although, as Lord Kames justly enough observes, “ it “ pleases all men at some times, and some “ men at all times*.”

Dr. Hartley gives the following ingenious analysis of the **ORIGIN OF LAUGHTER**, and of

* Locke's Essay, book ii. ch. xi. sect. 2.

Johnson's Prefaces, vol. i. page 40—43.

Spectator, vol. i. No. 58—63.

Cowley's Works, page 2.

Lord Kames's Elements of Criticism, vol. ii. ch. xiii.

Priestley's Lectures on Criticism, lect. xxiv.

the pleasure that we derive from the productions of wit and humour :

He observes that children do not laugh loud for some months; that laughter is a nascent cry stopped on a sudden, occasioned by surprise, bringing on a momentary fear first, and then a momentary joy upon the removal of that fear.

The tendency to laughter is increased by imitation: children laugh most when they see others laugh.

By association, the motions of the chest following with continually greater facility the same degrees of mental emotion, children at last laugh upon the most trifling occasions, where there is no perceptible fear, and little surprise.

By degrees, they acquire a power of suspending the actions both of laughing and crying, and associate this power with ideas of decency, fear, shame, &c. and the disposition to laughter decreases by observing that their equals laugh less.

As children learn the use of language, they learn to laugh at sentences or stories which excite alarms and dissipate them instantaneously,

ously. By degrees, agreeably to the process before described, they come to be diverted by every little jingle, pun, contrast, &c. though the harshness and inconsistency with which it first strikes the fancy, be so minute as scarcely to be perceived. This is the origin of the laughter excited by wit, humour, buffoonery, and the like.

But by degrees this species of laughter abates, from the same causes as the other before mentioned, so that adults, and those who are judges of politeness and propriety, laugh only at such strokes of wit and humour as surprise by some unusual degree of contrast or coincidence, and have at the same time a due connection with pleasure and pain, so as neither to be too glaring nor too faint: in the first case the representation raises dislike, in the latter it becomes insipid.

Hence it appears that laughter will be excited in different persons according to their different opinions or dispositions: that persons of light minds will be disposed to profuse laughter by the application of low contrasts, similitudes, &c. to serious subjects, and that this levity of disposition will be increased by it. Also, that persons who give themselves
up

up to mirth, wit, and humour, must thereby disqualify their understandings for the search after truth; as by perpetually hunting after apparent and partial agreements and disagreements, while the true nature of things affords real agreements or disagreements that are perhaps quite opposite, a man must by degrees pervert all his notions of things themselves, and become unable to see them as they really are*.

SECTION IV.

Origin of the Affections.

SOME of the AFFECTIONS, besides what are called the natural appetites, are commonly believed to be instinctive, and therefore take the name of NATURAL. Such are the parental, filial, and fraternal affections. Also the love of truth and virtue. Other affections are evidently FACTITIOUS, such as avarice, friendship, patriotism, the love of riding, hunting, music, dancing, and the like, which ne

* Hartley, page 258—260, quarto, vol. i. page 437—441, octavo.

Search's Light of Nature, vol. ii. part ii. ch. xxi. sect. 14—17.

considerate person regards as original and instinctive feelings.

The PHENOMENA which countenance the supposition that certain affections are implanted by nature in the human mind, are these: the apparent simplicity, and likewise the strength and vividness of these feelings, together with the difficulty, and supposed impossibility of tracing them to any other cause. Also, the assumed universality, and general uniformity of such affections in the human species.

It is however a presumption against this supposition of a double origin of the affections, that feelings so similar in their nature and effects should be so unlike in their origin: the general rule of philosophising is, that phenomena of the same kind are to be traced up to the same cause. ASSOCIATION is the acknowledged cause of some of the affections, therefore probably of all.

The affections are states of considerable pleasure or pain: they are evidently excited by external objects; but these, excepting in the case of impressed sensations, can only affect us by association: therefore all the affections are the result of association.

Successive

Successive impressions, pleasing or painful, are made upon the mind by the objects of the affection: the COALESCENCE of these impressions constitutes the affection either of love or hatred, according to the predominance either of pleasing or painful ideas: the affection thus formed is modified by the circumstances of probable or improbable, past, present, future, and the like; and is associated with the sensation of the object, with the idea, with the name, and with a variety of accidental circumstances.

I love my friend: this affection is compounded of complacency and good will. I think upon him with complacency because he possesses many virtues, because he has been the immediate cause of many pleasing sensations and recollections, because his idea is associated with many other pleasures than those which he has directly produced: I desire his happiness from a sense of gratitude, from the delight I take in seeing him happy, from the conviction that the greater his happiness is, the greater will be his capacity for communicating happiness to others, &c. These feelings coalesce into a complex and vivid affection: I call it friendship: it associates itself with
the

the person of my friend, with his idea, with his name, and with many circumstances naturally or fortuitously connected with him.

A child is continually receiving marks of kindness from his father : these produce complacency, and by reciprocal expressions of complacency benevolence is generated. The parent sometimes contradicts the will of the child, sometimes expresses displeasure, sometimes corrects and chastises him. This produces fear. Complacency, benevolence, and fear, combined together, constitute filial reverence and affection. If the parent is wise, and maintains in his conduct a just medium between indulgence and severity, the filial affection generated thereby is of the most perfect kind, and productive of the best effects of filial duty and mutual happiness. If indulgence predominates, the child becomes a prey to ungovernable passions and self-will ; and as he advances to maturity, seeing the folly of his parent, and feeling its pernicious effects, filial affection degenerates into contempt. If severity is the character of the father, fear and aversion will be the inevitable feeling of the child ; and the harsh and unkind parent will in vain look for the attentions of a du-

tiful and affectionate family to soothe the infirmities of declining years.

In a similar way it would be easy to analyse the conjugal, parental, and fraternal affections, patriotism or the love of one's country, benevolence, the love of truth and virtue, the love of God, &c. and thus to prove that all the affections of the human mind are the effect of association, and not of instinct.

It is to be remembered that, according to the theory of Dr. Hartley, all impressions upon the mind are produced by vibrations; all revived impressions, i. e. ideas, by revived vibrations; and all associated impressions, whether sensations or ideas, by associated vibrations or vibratiuncles. But whether this theory be true or false, the generation of the affections by the association of ideas remains the same, being established upon independent evidence.

That the affections are very COMPLEX feelings, though apparently simple, is evident from the preceding analysis. What the elements are which combine to constitute an affection in any given case, and in what proportion they are blended together, is very difficult if not impossible to ascertain. The various causes which combine to modify and diversify

verify the affections are very judiciously enumerated by Dr. Cogan in his late ingenious *Treatise on the Passions**.

The doctrine of association accounts for the seeming **SIMPLICITY** of these complex feelings, by the perfect coalescence of their component parts: just as the whiteness of the sun's light is produced by the perfect mixture of the seven primary colours.

The **VIVIDNESS**, and vigour of the compound feeling may be equal to that of a sensation: for, though each miniature is less than a sensation, yet all the ideas combined together, and mutually supporting each other, may produce a feeling that shall even exceed the impression of an external object upon the organs of sense.

Impressions which are the elements of filial and fraternal affection, and of the love of truth and virtue, and the like, are made upon the mind before the memory begins to record its ideas: hence these affections are regarded as having a peculiar claim to the character of **NATURAL**. The universality of parental affection seems to have gained it the character

* Cogan's *Philos. Treatise on the Passions*, b. ii. ch. ii.

of instinctive. But the transfer of the mutual affection of the parents to their infant offspring, seems sufficient to account for the origin of the affection ; while the helplessness of the infant, the hopes of the parent, and a multitude of other circumstances which it is unnecessary, and would indeed be tedious, to enumerate, easily explain the growth of parental affection.

The similarity of the natural constitution of mankind, of the circumstances in which they are placed, and of the impressions to which they are exposed, sufficiently accounts for the supposed UNIFORMITY and UNIVERSALITY of the affections, without having recourse to the needless hypothesis of instinctive principles.

The doctrine of association alone accounts in an easy and satisfactory manner for that VARIETY which obviously prevails in those affections which are commonly believed to be implanted by nature in the mind of man ; and which, if the common hypothesis be true, ought to be as uniform and invariable as the appetites of hunger and thirst, or the sensations of colour and sound. This also is a strong presumption in favour of the truth
of

of the theory itself, because it explains phenomena which cannot be solved upon any other hypothesis.

If this analysis of the affections be correct, and it seems to be favoured by every phenomenon of human nature, it is certainly of great PRACTICAL IMPORTANCE, as it leads to the right discipline of the affections, which is the true art of life; and the most effectual means of securing ultimate happiness, the great end of intellectual existence*.

SECTION V.

Classification of the Affections.

AFFECTIONS are modifications of pleasure and pain, arising from the perception of natural good or evil, according to the circumstances in which they occur to the notice of the mind.

They are sometimes called PASSIONS, as opposed to actions: the latter being perfectly

* Hartley on Man, prop. 14—89.

Search's Light of Nature pursued, vol. ii. part ii.
ch. xxi.

voluntary, the former not being immediately dependent on the will.

Dr. Cogan makes a curious and perhaps a just distinction between passion, emotion, and affection. **PASSION** is the first feeling of which the mind is conscious, from some impulsive cause by which it is wholly acted upon, without any efforts of its own either to solicit or to escape the impression. **EMOTIONS** are the sensible effects, produced by the impetus of the passion upon the corporeal system. **AFFECTIONS** signify the less violent, more deliberate, and more permanent impressions, whether pleasing or painful, whether of a benevolent or malevolent character*.

The **PRIMARY** or general passions, according to Dr. Hartley's distribution of them, are ten : five grateful, and five ungrateful.

Of the five grateful passions the first is **LOVE**, which arises from the contemplation of good in the abstract.

2. **DESIRE**, which is love excited so as to put us upon action.

3. **HOPE**, which arises from the probability of attaining absent good.

* Cogan on the Passions, ch. i. sect. i.

4. JOY, from the possession of the present good. And

5. PLEASING RECOLLECTION, which takes place when the object is withdrawn, and keeps up love to it.

Mr. Locke maintains that desire is universally a state of uneasiness. Dr. Hartley† thinks that it is originally a state of pleasure; but allows that by the mixture of fears, disappointments, and strong agitations of mind, it is greatly chequered with misery*.

The five ungrateful primary passions corresponding with the five grateful ones, and excited by the perception of evil in similar circumstances, are HATRED, AVERSION, that is, active hatred, FEAR, GRIEF, and DISPLEASING RECOLLECTION†.

The affections, or, as Dr. Hartley calls them, the INTELLECTUAL PLEASURES AND PAINS, are arranged by him under six general classes, viz. imagination, ambition, self-interest, sympathy, theopathy, and the moral

* Locke's Essay, book ii. ch. xxi. sect. 32—34.

Hartley on Man, vol. i. page 372, octavo; 220, quarto.

Grove's Works, vol. iv. pages 136, 137.

† Hartley on Man, prop. 89.

sense: all which may be traced up to the association of ideas; being deducible either from sensible pleasures and pains, which are evidently original, or from the combination of other intellectual pleasures or pains which are derived from sensible ones.

* First, The pleasures and pains of IMAGINATION: these arise from the perception of natural or artificial beauty or deformity, and are distinguished into seven kinds,

1. Those pleasures which arise from the beauty of the natural world.

2. From the works of art.

3. From the liberal arts of music, painting, and poetry.

4. From the sciences.

5. From beauty of person.

6. From wit and humour.

7. The pains which arise from gross absurdity, inconsistency, or deformity*.

Secondly, the pleasures and pains of AMBITION, which arise from the opinions of others concerning us; the sense of honour and of shame. These respect,

1. EXTERNAL ADVANTAGES OR DISAD-

* Hartley, ch. iv. sect. i. prop. 94.

VANTAGES : the principal of these are fine clothes, riches, titles, and high birth ; with their opposites, rags, poverty, obscurity, and low birth.

2. **BODILY PERFECTIONS AND IMPERFECTIONS** ; these are beauty, strength, and health ; or deformity, imbecility, and disease.

3. **INTELLECTUAL ACCOMPLISHMENTS AND DEFECTS** : these are sagacity, memory, invention, wit, learning ; and their opposites, folly, dulness, and ignorance.

4. **VIRTUE AND VICE** ; namely, piety, benevolence, courage, temperance, chastity, humility ; and the vices contrary to these*.

Thirdly, The pleasures and pains of **SELF-INTEREST** ; arising from the possession or want of the means of happiness ; and security from or subjection to the hazards of misery. Self-interest is of three kinds.

1. **GROSS SELF-INTEREST**, or the cool pursuit of the means whereby the pleasures of sensation, imagination, and ambition, are to be attained, and their pains avoided ; of this the chief species is the love of money.

2. **REFINED SELF-INTEREST**, or the de-

* Hartley, ch. iv. sect. ii. prop. 95.

liberate pursuit of the means that relate to the pleasures and pains of sympathy, theopathy, and the moral sense; when religion, virtue, and benevolence, are practised with an explicit view to our own happiness.

3. **RATIONAL SELF-INTEREST**, or the pursuit of the greatest possible happiness, without any partiality to this or that kind of happiness, means of happiness, &c. This is the same thing with the abstract desire of happiness and aversion to misery, which is not, however, a universal affection, though commonly believed to be such. The hopes and fears relating to a future state, or to death, are of this kind.

That these feelings are factitious, and deducible from association, may be illustrated by tracing the origin and progress of one of the most conspicuous of our interested affections, the **LOVE OF MONEY**, which eminently elucidates the origin of the affections, and the doctrine of association in general.

When children first see a piece of money, they are pleased with it as with any other toy. By degrees they find that it is the means of procuring other toys and objects which they desire. Hence they first learn to value
it.

x. As they advance to maturity they see more of the uses of money ; that it produces necessities, conveniences, comforts, respect, influence, &c. This increases the desire of money : desire produces the custom of making efforts to obtain it, and of treasuring it up : custom generates habit, and by degrees the love of money becomes one of the strongest and most disinterested affections of the human mind ; that is, an affection which seeks for nothing but its own gratification, without any view to further use or advantage.

The love of money, which would otherwise swallow up the other affections, is checked by the strong desires of all, and especially young persons, after particular gratifications, to obtain which they are inclined to part with it ; by the insignificance of riches in warding off contempt, disease, and death, and in obtaining the pleasures of intellect, of the moral sense, and sometimes even of sympathy, ambition, imagination, and sensation ; lastly, by the eager pursuit of any particular end, such as fame, learning, &c. or the indulgence of taste, and the like*.

Hence

* The pleasures to be acquired by parting with money
lessen

Hence we see the reason of the mixture of different and seemingly opposite qualities in the same character, as that a man should be both niggardly and profuse : also, why the love of money must in general grow stronger with age, especially if particular gratifications to which a person is most inclined become insipid or unattainable*.

Fourthly, The pleasures and pains of **SYMPATHY**, that is, those which arise from the pleasures and pains of our fellow-creatures. Of these there are four classes :

1. Those by which we **REJOICE AT THE HAPPINESS OF OTHERS** ; these are sociality, benevolence, generosity, gratitude.

SOCIALITY is the pleasure we take in the company and conversation of others, and partly lessen the desire of keeping it, and by association weaken in some degree the desire of obtaining it. Yet in another view the desire of the pleasures to be purchased by money increases the desire of obtaining it, and by association the pleasure of keeping it. This contrariety in our associations, Dr. Hartley thinks, is not only the means of limiting certain passions, but is a mark set upon them by the Author of Nature, to show that they ought to be limited even in our progress through this life, and that they must ultimately be annihilated, every one in their proper order.—Hartley, page 271, 272, quarto ; vol. i. page 460, octavo.

* Hartley, part i. ch. iv. sect. iii. prop. 96.

ticularly

ticularly of our friends and acquaintance, and is attended with affability, complaisance, and candour. In children it is generated by the preponderance of pleasure which they receive from, or in company with, others, and the same cause generally operates to produce the same effect through life.

BENEVOLENCE is that pleasing affection which engages us to promote the welfare of others to the best of our power. It rises from sources similar to sociality, and it is cherished by the high degree of esteem annexed to it, and the advantages it procures.

GENEROSITY is an affection which disposes us to forego great pleasures, or to endure great pains, for the benefit of others: it is benevolence in a high degree.

GRATITUDE is benevolence exercised towards a benefactor.

2. Those by which we **GRIEVE FOR THE MISERY OF OTHERS**; these are compassion and mercy.

COMPASSION is the uneasiness which a man feels at the misery of another. It is generated in children by those expressions of pain in others which excite similar feelings in themselves; by the pains taken

taken to excite the sympathy of children when parents, attendants, and others, are suffering; by the restraints they often undergo from the uneasinesses and pains of others: and in adults, it is confirmed by irritability of nerves, by great similar trials and afflictions, by benevolence to suffering friends, by the esteem and praise annexed to it, and the like.

MERCY is compassion exercised to an object that has forfeited his title to the continuance of happiness, or to the removal of misery, by some demerit, particularly against ourselves.

3. Those by which we REJOICE AT THE MISERY OF OTHERS: these are moroseness, anger, revenge, jealousy, cruelty, and malice.

MOROSENESS, peevishness, and severity, arise from whatever makes disagreeable impressions upon the mind, while our fellow-creatures or their ideas are present with us.

ANGER is a sudden start of passion, by which men wish and endeavour harm to others.

REVENGE rejoices in it when done.

Anger is generated by the desire to prevent harm to ourselves, which leads us to threaten

threaten it to others, to desire their harm, and so to inflict it : but in proportion as a correct moral sense gains its due influence over us, anger is restricted to voluntary agents who intentionally injure us, and proportioned to the degree of injury received.

MALICE deliberately wishes the misery of others. **CRUELTY** delights in the view and infliction of it, without the consideration of injury received. These are habits of mind. They originate in anger indulged and gratified; and are most apt to rise in the minds of the proud, the selfish, and the timorous.

JEALOUSY arises from the suspicion of a rival in the affections of a person of the other sex. It is a species of anger.

4. Those affections by which we **GRIEVE FOR THE HAPPINESS OF OTHERS**, are **EMULATION** and **ENVY**. These arise from the eager desire of riches, honour, power, &c. which leads us to think that our happiness is diminished by what others enjoy*.

Fifthly, The pleasures and pains of **THEOPATHY**, or those which arise from the contemplation of God, of his attributes, and of

* Hartley, part i. ch. iv. sect. 4. prop. 97.

our relation to him. These are love and fear.

Love is associated with gratitude, confidence, and resignation. It is produced by the contemplation of divine bounty and benignity; and it is supported and increased by the consciousness of upright intentions, the hope of future reward, by prayer, conversation, and contemplation.

The love of God rises in part from interested motives; but when all the sources of it coalesce, it becomes as disinterested as any other affection, and may rise to such a height as to prevail over all other desires, interested or disinterested.

ENTHUSIASM is a mistaken persuasion of any person that he is a peculiar favourite with God, and that he receives supernatural marks thereof. It is a degeneration of love.

The FEAR of God arises from a view of the evils of life, the threatenings of scripture, the sense of guilt, the infinity of the divine attributes, from prayer, meditation, and the like. When restrained within proper limits, it is awe and reverence; when excessive or not duly regarded, it degenerates into superstition, or atheism.

SUPER-

SUPERSTITION is a mistaken opinion concerning the severity and punishments of God, magnifying these in respect of ourselves or others.

ATHEISM is speculative or practical. Speculative atheism denies the existence of God. Practical atheism is the neglect of God; thinking of him seldom and with reluctance; disregarding him in actions, though not denying him in words. Both kinds may be supposed often to proceed from a sense of guilt, and consequent fear of God, producing aversion to him*.

Sixthly, The pleasures and pains of the **MORAL SENSE**, excited by the contemplation of moral beauty and deformity.

The **MORAL SENSE** is the disinterested approbation of piety, benevolence, and self-government in ourselves and others, and the correspondent disapprobation of vice. It is the result of education and mental discipline; it leads to the pure love of God and the practice of universal virtue.

SCRUPULOSITY is a degeneration of the moral sense, which arises from a conscious-

* Hartley, part i. ch. iv. sect. v. prop. 98.

ness of guilt, and an erroneous method of reasoning*.

* Dr. Cogan's Philosophical Treatise on the Passions, ch. ii. iii.

Hartley, part i. ch. iv. sect. 6. prop. 99.

I prefer the arrangement of Dr. Hartley to that of Dr. Cogan, as better adapted to illustrate the doctrine of the association of ideas, and the origin of the affections: but it would not be doing justice to the last-mentioned excellent writer not to refer to him upon this subject, as having given a very comprehensive detail of the various affections of the human mind, and distinguishing them from each other with correct philosophical precision.

CHAPTER IX.

OF THE WILL.—DISCUSSION OF THE DOCTRINES OF LIBERTY AND NECESSITY.

SECTION I.

The Question stated.

VOLITION is that state of mind which is immediately previous to actions which are called voluntary. The WILL is the faculty which the mind possesses, or is supposed to possess, of bringing itself into that state.

VOLITION is a modification of the passion of desire.

NATURAL LIBERTY, or, as it is more properly called, PHILOSOPHICAL LIBERTY, or LIBERTY OF CHOICE, is a power of doing an action or its contrary, all the previous circumstances remaining the same*.

Or, in other words, NATURAL LIBERTY

* Hartley on Man, vol. i. page 500, octavo; 296, quarto.

consists in a power of choosing without motive, where motives are equal, or in opposition to the strongest motive*.

MOTIVE, in this discussion, is to be understood in its most extensive sense; it expresses whatever MOVES or influences the mind in its choice: it includes the bias of the mind as well as the end in view: it comprehends both reason and inclination, and, in a word, every circumstance immediately previous to the volition, and which in the least degree contributes to generate the choice. It is of great importance in this controversy, in order to preclude verbal disputes, to keep this sense of the word continually in view†.

Dr. Reid defines the liberty of a moral agent to be, "a power over the determinations of his own will."

This definition is exceptionable. It implies that the will forms determinations, and that the mind may *if it pleases* overrule these determinations. It supposes that the mind has two wills: first, the will to form volitions; and secondly, the will which governs those volitions. But if this be the case, it

* Dr. Gregory's Philosophical Essays, sect. i. page 3.

† Edwards on the Will, page 7, 8.

may be asked, What governs the governing will* ?

Dr. Reid's definition, however, as far as it is intelligible, seems to coincide with the preceding ones. The mind in all circumstances might have chosen differently ; and he expressly contends for the superiority of the mind to whatever falls under the definition of motive†.

Mr. Abraham Tucker, the acute author of a work, intitled *The Light of Nature pursued*, by Edward Search, Esq., after having argued strenuously against the existence of a liberty of indifference, that is, a power of choosing without regard to motive, contends for the existence of free will, the exercise of which he conceives "to be only a particular species of action, performed in raising up ideas, or fixing them in the mind, which shall determine us to such volitions as we want." And he expressly disavows the doctrine of necessity. But this is a verbal dispute. The liberty of indifference which this author denies, is philosophical liberty ; and the free

* Reid on the Active Powers, Essay iv. ch. i. page 267.

† Reid, *ibid.* ch. iv.

will for which he pleads, is nothing more than liberty of action, which no one controverts*.

The only question in dispute between the advocates for philosophical liberty and the necessarians, is this: Whether volition can take place independently of motive? The libertarian contends, that in the same previous circumstances, and with views and inclinations precisely the same, a different choice may be made. The necessarian denies this, and maintains that there can be no difference in the choice without a correspondent difference in the previous state of the mind, that is, in the judgment or the inclination of the agent. If I resolve to take a journey, it is because I am inclined to it, or have a reason for it, or both. While this state of mind continues my resolution continues. If the resolution is laid aside, it is owing to a previous change in the judgment, or in the inclination, or, as we commonly express it, the mind is altered. If this postulate of the necessarians be granted, the controversy is at an end.

* Search's Light of Nature pursued, vol. i. ch. vi. sect. 34, 35.

Libertarians differ among themselves with regard to the extent of this "self-determining power," as they choose to call it. Some extend its influence to all voluntary actions; others limit the exercise of it to some mental operations only: such, for example, as the act of suspending the choice, of deliberating, of choosing out of contending motives, and the like.

But this makes no difference in the state of the question. Limit the self-determining power as much as you please, the question still recurs, Can you suspend, deliberate, &c. without a reason for it, without inclination to it, and where you have the strongest motives to the contrary? The libertarian replies Yes; the necessarian No; and upon this fact they join issue.

It is necessary to keep this precise state of the question steadily in view, to avoid being misled by the declamation of either party.

The reason why liberty of choice is restricted by some philosophers to mental operations, seems to be this: that the dependence of volition upon motive in voluntary external actions, is so obvious that it can hardly escape

the notice of the most superficial observer, so that few who pay any attention to what is passing in their own minds will call it in question. But the influence of motives in mental operations, is more subtle and less easily distinguished. Attentive observation, however, will sufficiently prove, what indeed we might with reason antecedently expect, that the same faculty is governed by the same law, in its less obvious, as in its more sensible operations*.

EXTERNAL LIBERTY, OR LIBERTY OF ACTION, is the power of doing what we please, or will ; or, in other words, the power

* Mr. Locke was the first philosopher who introduced this curious limitation of free will to the act of deliberation only. Could this sagacious writer really fall into such an unaccountable confusion of ideas ? Or was Mr. Locke apprehensive that if he avowed necessitarianism, he should be exposed to the invidious charge of Hobbism, and atheism ? Perhaps, indeed, Mr. Locke himself might not see the reconcileableness of the necessity of human actions to moral agency and accountableness ; and, through a virtuous though unnecessary fear of moral consequences, might be driven to this miserable refuge.—Locke's Essay, book ii. ch. xxi. W. Belsham's Essays, Philosophical, Historical, and Literary, vol. i. No. ii. ed. 2.

of

of carrying our volitions or purposes into effect.

EXTERNAL LIBERTY is opposed to COM-PULSION from external force, as philosophical liberty is to necessity, or the definite influence of motives, in definite circumstances. Liberty of action may exist independently of liberty of choice; that is, the mind may be wholly unrestrained in the execution of its volitions, though in the same circumstances it could not have made a different choice; liberty of choice likewise, if it exists at all, is perfectly independent of liberty of action*.

SECTION II.

Arguments in favour of Philosophical Liberty.

THE libertarians contend that man possesses "an independent, self-governing, self-determining power, which he may at his own discretion exert, by acting either ac-

* Hartley on Man, vol. i. page 501, octavo; 296, quarto.

Priestley's Illustrations of Necessity, sect. i.

Palmer on Liberty, sect. i.

" cording

"according to motives, or in opposition to motives, or without any motives at all*." In other words, that a man may choose differently, the previous circumstances remaining the same.

To prove the existence of this self-determining power, which is capable of choosing and acting independently of motive,

First, an appeal is made to CONSCIOUSNESS†.

We

* These are Dr. Gregory's words in the passage before referred to; and they contain a very clear, concise, and consistent statement of the doctrine of philosophical liberty.

† "We have by our constitution," says Dr. Reid, "a natural conviction or belief that we act freely; a conviction so early and so universal, that it must be the result of our constitution, and the work of him that made us." "The genuine dictate of our natural faculties is the voice of God no less than what he reveals from heaven; and to say that it is fallacious, is to impute a lie to the God of truth."—*Essay on Active Powers*, page 3:2.

This "natural conviction that we act freely," is precisely the same with the natural conviction which every child and every illiterate person feels, that the earth is at rest, and that the sun revolves. The solemn air with which the observation is introduced, is perfectly ludicrous. Will any man of reason and reflection seriously maintain,

We are conscious, it is said, that we do in fact sometimes choose without any motive, or where motives are equal, and even in opposition to the influence of motive.

We are also conscious, that in every instance we might choose otherwise than we do.

We applaud ourselves for some actions, and condemn ourselves for others; and this self-applause and self-condemnation is founded on the consciousness of liberty of choice.

Secondly, Free will is argued from COMMON SENSE; that is, from the irresistible conviction and universal consent of mankind.

i. Very few have denied the existence of liberty of choice even in THEORY*. There have

tain, that he is taught "by the voice of God" to believe, that in circumstances precisely similar, with inclinations and views in every respect the same, it would be in his power to make a different choice? Such an one may consistently enough "defy the tribunal of reason, and laugh at the artillery of the logician;" but let him not at the same time assume the style and character of a philosopher.

* This is only saying that there have been few philosophers; the great mass of mankind content themselves in this, as in many other philosophical speculations, with
not

have been many fatalists, but few necessarians: the fatalists themselves absurdly attempting to reconcile fate with freedom.

2. All men, without excepting professed necessarians themselves, are under the necessity of ACTING upon the principles of liberty, whatever their hypothetical speculations may be.

All men agree in applauding some actions and condemning others; which would be absurd, upon the supposition that men were destitute of free will.

All men make a distinction between harm and injury: for example, between a blow given by design and one occasioned by accident. In the former case the agent is believed to be free, and to have had it in his power to have avoided giving the blow: in the latter case there was no intention and no liberty; and therefore, though the hurt and

not thinking at all about the matter, or with very crude and inconsistent ideas upon the subject. There have been many Ptolemeans, but few Copernicans, even in theory; and of these few, most, if not all, have spoken, and acted in the intercourse of life, as if the earth was at rest and the sun moved. Will any man of understanding be convinced by such reasoning, that the Ptolemaic system is true, and the Copernican false?

the

the smart is the same as in the former, the sufferer feels no resentment.

The laws of all nations agree to punish an action performed by a man in possession of reason, which they excuse in a lunatic: the former is free, the latter not.

Thirdly, The existence of a self-determining power, is argued from the ABSURD, immoral, impious, and dangerous CONSEQUENCES of philosophical necessity.

1. To act upon the principles of necessity would expose a person to universal ridicule and contempt*.

2. The doctrine of necessity subverts the

* Dr. Gregory has been pleased to make himself very merry at the expence, as he imagines, of the necessarians, by exhibiting what he erroneously supposes to be the practical effect of the necessarian hypothesis. Such ridicule injures no one but its author. At any rate the practical necessarian is as consistent a character as the practical freewiller. What does Dr. Gregory think would be the consequence, if men were to act sometimes "according to motives," sometimes "in opposition to motives," and sometimes "without any motive at all?" which is his definition of free will. A lunatic asylum is the only place where such lawless and capricious beings could exist in safety either to themselves or others.—Dr. Gregory's Essay, sect. xi. page 249—266. Dr. Crombie on Necessity, page 379—382.

argument

argument for the divine existence. If every thing is necessary, there is no proper agent in the universe, no proper cause of any effect : therefore, there is no God*.

3. The doctrine of philosophical necessity destroys the distinction between natural and moral qualities ; it annihilates virtue and vice, merit and demerit.

4. It is inconsistent with all moral discipline and moral government : there can be no proper foundation for praise or blame : to reward virtue would be folly, and to punish vice would be tyranny and injustice. Remorse for the most criminal actions would be absurd ; all repentance needless, and all exhortations to reformation and virtue, nugatory.

5. All the declarations in scripture of rewards to the virtuous are absurd ; all expressions of displeasure against vice, and all threatenings of punishment are unjust ; all professions of compassion for sinners are insincere ; all exhortations to repentance, and all offers of mercy addressed to persons placed in circumstances in which it is impossible for

* Dr. Reid on the Active Powers, page 289.

them to comply with such exhortations, are injury and insult.

6. Upon the system of necessity God is the only agent in the universe, and the proper, efficient cause of all evil, natural and moral*.

SECTION III.

Doctrine of Necessity. — Argument from Consciousness.

THE advocates for the doctrine of necessity maintain that the will is never determined without a motive, and that motives always influence the will in a definite and invariable manner, so that it is impossible to choose the action *A*, and its contrary *a*, the motives or previous circumstances remaining the same.

NECESSITY is to be carefully distinguished from COMPULSION, from which it is essen-

* Beattie on Truth, part ii. ch. ii.

Priestley against Beattie, ch. v.

Reid on Active Powers, essay iii.

Gregory's Essay on the Relation between Motive and Action, &c.

tially different. Compulsion is external force operating in opposition to judgment or inclination. Necessity excludes all foreign controul, and allows no influence but that of motive in the extensive sense already defined, including the bias of the mind as well as the end in view. The will is as effectually determined by motives, when judgment and inclination concur in the choice, as when there is a conflict of opposing motives, and the stronger prevails. Necessity by no means implies any reluctance in the mind against the choice it makes. All words therefore which seem to imply external force, or which convey the idea of a will opposing the will which precedes the action, that is, of two distinct wills existing together in the mind, ought to be avoided as tending to introduce confusion into the subject. For this reason, it is improper to speak of the irresistible or the invincible power of motives, and of the power which the mind has over its own determinations.

The fact contended for is, that the same volitions certainly and invariably follow the same motives or previous circumstances, and that there can be no change in the volition
but

but in consequence of a correspondent change in the previous circumstances, that is, in the views or state of the mind.

If definite volitions be the invariable result of definite previous circumstances, there must be some reason for, some cause of, this constant conjunction of motive and volition : this CAUSE, known or unknown, is called NECESSITY. The word necessity, therefore, like the words gravitation, electricity, magnetism, and many others, is a term invented to express the undefined cause of a known effect.

It has been questioned whether motives are physical causes of volitions. But the dispute upon this subject is trifling, and merely verbal. Let motives be denominated at pleasure mechanical, physical, or moral causes, or no causes of volition at all, the fact still remains the same. Definite volitions follow definite motives, with the same invariable constancy with which the needle follows the magnet, or a stone obeys the law of gravitation. All these effects follow their respective preceding circumstances with equal certainty ; but no intelligent person will ascribe phenomena so widely different to the same causes.

Custom, the arbitress of language, has applied the term *physical* to effects produced upon involuntary subjects, and to the causes by which such effects are produced; but to the previous circumstances which govern the will, and to the volitions resulting from them, it has given the name of *moral* causes and effects; and the distinction is sufficiently obvious and intelligible, even though as the necessarians contend, moral causes are evidently as invariable in their operation as physical ones. As to the mode in which causes, either physical or moral, operate to produce their respective effects, it is beyond the comprehension of the human intellect: but this will be the subject of future disquisition.

The doctrine of NECESSITY, asserting simply the constant invariable conjunction of motive with volition, might with equal propriety have been denominated by the less invidious name of CERTAINTY; but an impartial inquirer after truth will learn to divest himself of verbal prejudices, and to attend solely to fact and argument*.

* Edwards on the Will, part i. sect. 3, 4.

The first argument in favour of the doctrine of necessity, is derived from CONSCIOUSNESS.

1. We are conscious that we never do nor can form a volition, or perform a voluntary action, without an assignable motive.

If we really possess this boasted self-determining power, and if this faculty lies, as we are assured it does, at the foundation of all moral agency and accountableness, its existence may be easily ascertained. Let the experiment be tried : let a man attempt to perform a voluntary action without a motive ; to walk, for example, or to speak, or to strike a blow. He will find it impossible. He will find it as easy to move a mountain from its base as to rise from his chair by a sovereign act of the will, without either reason or inclination for the choice. Of this fact we have so clear a consciousness, that many libertarians themselves allow it, though not very consistently with the definition of free will, or with the notion of a self-determining power*.

2. We

* The libertarians complain that the necessarians misstate their doctrine, and represent them as totally deny-

2. We are also conscious that the vigour of the action is uniformly proportioned to the vigour of the motive.

If the motive be feeble the volition is languid, and hardly rises above a state of indifference; if the motive be strong, if reason and inclination concur in an eminent degree to prompt the mind to action, the volition is proportionably vigorous and active; if there be an opposition of motives, the vigour of the choice is proportioned to the excess of the preponderating motive.

nying the influence of motives. This charge against the necessarians is unfounded. The fact is, that they have no controversy with the advocates for philosophical liberty, as far as the influence of motives is admitted by them. But libertarians contend for the existence of what they call a self-determining power, superior to whatever falls under the definition of motive, which may act arbitrarily either in concurrence with motive, or in opposition to it. Some maintain that this power is frequently exerted, others that its operations are very rare, and even restricted to certain narrow limits. The necessarian philosopher utterly denies the existence of any such power, in any shape, and in every degree; and it is against this power, and this alone, that all his arguments are levelled, whether it be supposed to exert itself in every voluntary act, or only in one among ten thousand.—Search's *Light of Nature* pursued, vol. i. ch. 6. sect. 22—33. page 146, &c.

3. In

3. In proportion as motives approach to equality, the choice becomes more difficult ; it is reasonable to conclude therefore, that if they were perfectly equal no choice could be made.

It is objected, that, in fact, we often do choose out of equal things : for example, out of a number of guineas laid upon the table, fresh from the mint, I can select one in preference to the rest, though there is no assignable reason for the preference. But the truth is, that although the case of equal motives is often imagined, it very seldom occurs in fact. The slightest consideration is sufficient to turn the scale where the balance of motives is perfectly even. In the case supposed, I take the guinea which first attracts the eye, or which lies nearest or most convenient to the hand, or the like. And if we accustom ourselves to close reflection, we shall find, that in every case where the objects of choice are perfectly equal, there is something in the state of the mind which leads it to fix upon one in preference to the other.

It is proper to remark, that all the observations stated above, and all the appeals to consciousness in favour of the doctrine of

246 ARGUMENT FROM CAUSE AND EFFECT.

necessity, apply to voluntary operations of the mind, to suspending the choice, comparing, deliberating, and the like, as well as to external actions.

To assert, that though the volition does in fact uniformly correspond with the motive, or the previous circumstances, it might nevertheless in every instance have proved otherwise; and that the mind had a power in every case of making a different choice, is perfectly gratuitous; and it concedes all for which the advocates for necessity think it worth while to contend, viz. the constant conjunction of the motive with the volition: and few will maintain that constant uniform conjunction does not imply necessary connexion*.

SECTION IV.

Argument from Cause and Effect.

THE SECOND argument in favour of the necessity of human actions, is taken from

* Edwards on the Will, part i.
Priestley's Illustrations, sect. i.

the relation of CAUSE AND EFFECT. The following observations will illustrate this proof :

1. Certain consequents are found by observation invariably to follow certain antecedents. A stone projected falls to the ground. Iron sinks in water. A balance supporting equal weights stands at an equilibrium. When the sun is in cancer the days are long and the weather warm. A person who forms a part of the electric circuit feels the electric shock when the jar is discharged.

2. In these cases the antecedent circumstances are said to be the CAUSE, and the consequents the EFFECT. Thus the equality of weights is the cause of the equilibrium; the sun is the cause of heat and light; and the discharge of the jar the cause of the electric shock.

3. Philosophers who study with attention the phenomena of nature, are better acquainted with antecedent circumstances than ignorant persons, and form a different and more correct judgment of the causes of those phenomena. Thus, common people suppose that the rising of the sun produces day: the philosopher, more correctly, ascribes the effect

248 ARGUMENT FROM CAUSE AND EFFECT.

to the revolution of the earth upon its axis. The circumstances really previous to the effect, whether known or unknown, are considered as the proper causes of the effect.

4. The invariable connexion between antecedents and consequents gradually produces an association of ideas so fixed, as to excite a firm, unhesitating expectation of the consequents wherever the antecedents are observed to occur. We uniformly expect that the dislocation of a limb will produce pain, and that the return of the sun to capricorn will produce winter.

5. From the uniform conjunction of antecedents and consequents, we always infer that there must be some sufficient reason for this conjunction; or, in other words, that constant conjunction implies necessary connexion, whether we are able to discover this connexion or not. There is some reason why water runs down hill, why iron sinks, and cork floats upon water, why heat dissolves, and cold congeals.

6. If the effect produced is different from what we have been used to expect, we immediately conclude that there is some change in the previous circumstances: if all the previous circumstances appear to be the same,

the effect is miraculous, and produced by a power which counteracts the established laws of nature: if all the circumstances remain the same, and no superior power is introduced, we hesitate not to say that a variation in the effect is a natural impossibility: for the same previous circumstances cannot produce an effect and its contrary; they cannot cause the same thing to be and not to be. If iron is said to float upon the surface of water, we immediately conclude that it rests upon a substance specifically lighter than the water, or that it is supported by miraculous power: if both these are denied, we pronounce the fact an impossibility.

7. Definite volitions are found by experience to follow definite states of mind, as invariably as natural phenomena follow their known antecedents.

8. The observation of this fact generates the same unhesitating expectations of definite actions in definite circumstances, as in the case of natural phenomena. Every one expects that an avaricious man will embrace any favourable opportunity of increasing his wealth; that an ambitious man will seek the best means to gratify his lust of power; and that the

the benevolent man will rejoice in opportunities of relieving misery and doing good. If expectations of events depending upon intelligent agents are not so uniform as the expectations of natural phenomena from definite previous circumstances, it is not because we suspect that in the same circumstances different volitions may be generated, but because we cannot enter precisely into the views of the agent, nor perceive the exact state of his mind.

9. Hence it follows, that upon principles precisely the same with those upon which we reason and judge in the case of natural phenomena, STATES OF MIND AND MOTIVES may be called CAUSES; and VOLITIONS, EFFECTS; NECESSARY CONNEXION may be argued from CONSTANT CONJUNCTION; and a variation in the volition, when the previous circumstances remain precisely the same, is either a MIRACLE or an IMPOSSIBILITY. For example, that Judas, under the influence of the same bad passions, and with the same expectations of gain and of impunity, should have formed any other volition than that of betraying his master, was impossible. Had he acted differently, it must have been
either

either because he relented, that is, because there was a change in the state of his mind, or because his volition was supernaturally controuled. But that the very same state of mind which prompted him to the commission of the crime, should also prompt him to abstain from it, is a natural impossibility, it is a contradiction in terms*.

10. This reasoning appears to be irrefragable with regard to the production of any volition A, and its contrary a; and even with regard to any volitions A and B, which, though not opposite, are in the view of the mind unequal. The same state of mind which generates the one cannot give birth to the other. But it does not hold with equal force against the selection of one object out of many, A, A, &c. which are perfectly equal. I see no sufficient reason why the same state of mind which generates one may not generate the other. In other words,

* Edwards on the Will, part ii. sect. iii.

Hume's Essays, vol. ii. sect. vii. viii.

Hartley on Man, page 347, quarto.

Priestley's Illustrations, sect. ii.

——— Correspondence with Price, p. 294, 295.

W. Belsham's Essays, vol. i. essay i.

the reasoning does not hold against a power of choosing one out of equal objects, where there is sufficient reason for choosing one, but no reason for a preference of one above another.

That what is called the liberty of indifference, or the power of choosing out of equal objects, is not an attribute of the human mind, we know by experience, and especially by the argument from the divine prescience, which necessarily excludes all contingency. But that such a power, though to us inconceivable, is in itself possible, and that it may exist in the Supreme Being, and even that he has in some cases actually exercised this liberty, appears to me highly probable.

That the power of choosing out of equal objects is a perfection, none will dispute; for without it, in certain supposable cases, the Deity could not act at all, or must necessarily choose the inferior object when the superior was equally in his view, for want of power to make a choice amongst equals. For instance, if two or more systems equally good, and better than which could not exist, were at the same time present to the divine contemplation, it would either be impossible for
God

God to act at all, or he must necessarily choose a system of inferior excellence, in preference to any one of these. But this difficulty could have no place if he possesses, as no doubt he does, a power of choosing one out of an infinite number of systems all equally worthy of his attributes.

It may be said, that the possibility of equal objects cannot be proved. Agreed: but neither can the contrary be proved, and therefore it ought not to be assumed as a fact. Appearances are favourable to the supposition of equal objects of choice. For example, whether a cubic inch of water should have been placed originally in the Atlantic or the Pacific ocean? whether a blade of grass should grow in England or in China? and the like.

It has been said, that there can be only one best; but this is a grammatical quibble. By the best possible system, is meant a system, a better than which could not have been chosen: and this is all that any argument can prove to exist.

It is to be observed, that the liberty of indifference, though a perfection, is only a natural attribute, it is not a moral excellence. There can be no merit, though there may be
great

great advantage, in a power of choosing out of equal things. Where there is a real difference in the objects of choice, it is the honour of God to be limited by his wisdom and his goodness to the choice of that which is best, and most worthy of his character: and this the libertarian philosophers are as ready to allow as the necessarians themselves*.

The prescience of God excludes the liberty of indifference from all his rational creatures, as well as from mankind. For under the government of God no event can be contingent. And thus liberty of choice, in the only case in which liberty is a perfection, is left with the Supreme Being, who is the Cause of all causes, and the only proper Agent in the universe†.

* Clarke Dem. prop. xii. Boyle's Lectures, folio, vol. ii. page 50, 51.

Corresp. Price and Priestley, page 395, 396.

Cooper's Tracts, No. 2.

Reid on Active Powers, page 292.

† Did not his eye rule all things, and intend
The least of our concerns, since from the least
The greatest oft originate,—could chance
Find place in his dominion, or dispose
One lawless particle to thwart his plan,—
Then God might be surpris'd; and unforeseen
Contingence might alarm him, and disturb
The smooth and equal course of his affairs.

COWPER.
The

The libertarians have universally ascribed to the Deity the power of choosing out of equal objects. The necessarian philosophers have argued obscurely, not to say inconsistently, upon this subject, and have often substituted assertion for proof.

Leibnitz expressly denies the possibility of the existence of two things perfectly equal, because it would be impossible to place them in any part of space: and he affirms, that if there was not a best amongst all worlds God would not have made any. Dr. Hartley * declines giving any answer to the question whether God might have made a different universe equally perfect with that which now exists? He says, "One cannot in the least pretend either to deny or to affirm this kind of freedom in God." Mr. Cooper asserts, page 156, that there can be but one *best*; but this, as I have before observed, is either a mere verbal argument, or a gratuitous assertion†.

Dr. Priestley, in his controversy with Dr. Price, allows, perhaps inadvertently, that God is a self-moving and self-determining Being,

* Clarke and Leibnitz, page 93—95, 121—123, 173—177. App. page 251—257.

† Vol. ii. page 36, octavo; 331, quarto.

Corresp. page 105, 147, and his acute opponent triumphs very much in this apparent concession, page 350. But Dr. Priestley, in his reply, page 395, explains himself as meaning nothing more than that "God is the first cause and mover of all things." And he expressly reprobates the idea of ascribing a self-determining power to the Divine Being; "meaning by it that he acts without a motive." And as, page 404 he calls the power of choosing where motives are equal, "the absurdity of determining without a motive," and thinks that the "same constitution of mind would enable a person to determine contrary to all motive," he would, no doubt, upon the same principles, deny to the Deity the liberty of indifference, though he no where, as far as I can recollect, states his opinion explicitly upon that question.

SECTION V.

Objections against Philosophical Liberty..

THE THIRD argument in favour of philosophical necessity arises from the absurd and PERNICIOUS CONSEQUENCES of philosophical liberty.

I. Philo-

I. Philosophical liberty supposes either that an EFFECT EXISTS WITHOUT A CAUSE, OR THAT AN INFINITE PRECESSION OF VOLITIONS is necessary to every operative volition.

When a volition rises in the mind, it is either produced by motive, or it rises of itself, or it is the effect of an antecedent volition.

If it is produced by motive, this is necessity; if it rises of itself, it is an effect without a cause; if it is the result of a previous volition, this previous volition must either rise of itself, or be suggested by motive, or the effect of an antecedent volition, and so on ad infinitum; which is absurd.

Some have contended, that the mind chooses the motive by which it will be influenced when various and opposing motives are presented to its view: but this is only supposing a volition preceding the volition which produces the action; and by parity of reason this volition requires an antecedent volition, and so on ad infinitum; so that every distinct operative volition requires an infinite precession of volitions to produce it*.

II. Philosophical

* Edwards on the Will, part ii. sect. iv.

258 OBJECTIONS AGAINST LIBERTY.

II. PHILOSOPHICAL LIBERTY, as stated by some of its ablest advocates, is OF LITTLE USE ; for it is limited to a case which very seldom if ever occurs, namely, that in which motives are perfectly equal*.

III. PHILOSOPHICAL LIBERTY CONFOUNDS THE DISTINCTION BETWEEN VIRTUE AND VICE†.

Upon this hypothesis, a being acting from the best principles, dispositions, and habits, is incapable of virtue if destitute of liberty ; and a being acting under the influence of the worst principles and affections, is in like manner incapable of vice. The essence, therefore, of virtue and vice consists in liberty. But philosophical liberty bears an equal relation to all voluntary actions ; therefore all voluntary actions are equally good or evil ; that is, there is no moral distinction between one action and another.

For example, benevolence without liberty

Priestley's Illustrations, sect. iv.

—— Correspondence with Price, page 344—

348, 381—385.

* Price and Priestley, page 340—349, 381—405.

† “ If a man had no power,” that is, free will, “ he
“ could neither be wise nor foolish, virtuous nor vicious.”

—Reid on Active Powers, page 328.

is no virtue ; malignity without liberty is no vice. Both are equally in a neutral state. Add a portion of liberty to both ; benevolence instantly becomes an eminent virtue, and malignity an odious vice. That is, if to equals you add equals, the wholes will be unequal. By parity of reason, if to each of two equal vessels filled with pure water you add a grain of salt, one will be converted into a salutary draught, the other into a deadly poison ; or if to each end of a balance suspended in equilibrio you add an equal weight, you destroy the equilibrium. Than which nothing can be more absurd.

IV. THE DOCTRINE OF A PHILOSOPHICAL FREE WILL IS DANGEROUS TO VIRTUE.

1. As it makes virtue and vice to consist in something different from, and indeed independent on, motive, habit, and character, it tends to diminish the attention which ought to be paid to the discipline of the mind, to the formation of right principles, and to the acquisition of virtuous habits.

2. A belief in a self-determining power will encourage an inexperienced and thoughtless person to venture, if curiosity or inclination prompt, into circumstances of tempta-

tion and danger, because he conceives that he is possessed of a power sufficient to vanquish every motive to vice ; and if his virtue has been subdued ever so often, he has no fear of exposing himself to the same trials, because he believes that in circumstances precisely the same it will be in his power to make a different choice. And experience proves that multitudes are daily falling victims to this dangerous self-delusion.

On the other hand, the necessarian who is true to his principles, knows that, whatever be the force of virtuous principles, and the stability of virtuous habits, there are temptations which will overpower the most consummate virtue, and therefore he will not needlessly expose himself to any. And if he has found by experience that in any given circumstances his virtuous resolutions have failed, being assured by his principles that in the same circumstances he will inevitably act again in the same manner, he will see that his only security consists in avoiding temptation*.

* Mrs. Macaulay's Lett. on Education, page 485—490.

SECTION VI.

*Objections against Philosophical Liberty
continued.*

V. PHILOSOPHICAL LIBERTY IS INCONSISTENT WITH MORAL DISCIPLINE; it confounds all moral distinctions; and wherever it exists it subverts the foundation of approbation and disapprobation, of praise and blame, of reward and punishment.

Three cases only can be supposed. An intelligent and voluntary agent may be perfectly free, and indifferent to all motive; or perfectly necessary, and uniformly governed by motive; or his conduct may be regulated partly by motive, and partly by the self-determining power.

CASE I. If any intelligent agent is philosophically free, and perfectly indifferent to all motive, such an agent is not a proper subject either of approbation or disapprobation, of praise or blame, of reward or punishment.

1. Such a being performs an action which is regarded as morally good; he feeds the

hungry, he clothes the naked, he visits the prisoner. But he is not therefore deserving of APPROBATION. For approbation is a pleasing emotion of the mind, arising from the perception of actions which indicate, or are believed to indicate, good dispositions, and a good design. But by hypothesis the agent in question is void of both. Neither is he a proper subject of PRAISE; for praise is nothing more than the expression of approbation. Nor would it be of any use to REWARD an agent perfectly free; for, being wholly indifferent to motive, reward would neither influence him to the repetition of virtuous actions, nor would it stimulate other agents similarly constituted to follow his example.

2. Let an agent philosophically free perform an action commonly regarded as criminal; let him voluntarily kill an innocent man, or let him set fire to his neighbour's house. There is no ground for moral DISAPPROBATION. For disapprobation is a painful state of mind excited by the perception of conduct, which indicates or is thought to indicate bad dispositions or bad designs; but the agent in question is incapable

pable of either. It would be absurd to BLAME him, for blame is only the expression of disapprobation. It would be unjust to PUNISH him, for punishment would have no effect either to reclaim the sufferer, or to deter other beings similarly constituted, from similar mischief: and to punish with any other view is not justice, but revenge. Such a being ought to be restrained by force from doing further injury to himself or others: but this is not punishment in the proper sense of the word, any more than the confinement of a lunatic.

CASE II. An intelligent being may be a perfectly necessary agent, invariably influenced by the perception of motives to make a definite choice in definite circumstances. Such an agent is the proper subject of moral discipline.

If such a being perform an action morally right, if, prompted by compassion, he visit the sick, relieve the poor, and protect the fatherless, he is worthy of APPROBATION; he has performed a virtuous action, from a virtuous motive, from the best disposition, and with the best design. He is therefore.

entitled to PRAISE, the expression of moral approbation. And if his virtue be REWARDED by the success of his exertions, by the approbation of conscience, by the applause of the virtuous and the wise, by the blessing of heaven, or in any other suitable and conspicuous manner, it will in such an agent strengthen the motives to virtue, and will also stimulate other beings whose moral constitution is similar to his own, to imitate his virtuous example. A necessary agent therefore is the proper subject of approbation, praise, and reward.

Again, if such a being perform an action denominated vicious, if moved by envy he calumniate his neighbour, if prompted by avarice he defraud the orphan and oppress the poor, or if stimulated by malice he delight in mischief, his character and conduct must be viewed with the highest DISAPPROBATION by every moral agent who is capable of discerning the malignity of his heart, and the wickedness of his designs. And the greater the ascendancy of these odious dispositions, the less inclination or desire there is to resist them, the more detestable the character

of the agent, and the greater the disapprobation it excites.

But the expression of this disapprobation is **BLAME**. And if such a being is **PUNISHED** by the misery of a disordered mind and the torture of self-reproach, by the failure of his vicious purposes, and by the contempt and indignation of mankind, and if his vices should incur the positive penalties of just and equitable laws, the sufferings of the offender would tend to restrain his vices, to bring him to thoughtfulness, reflection, contrition and repentance; and the punishment thus inflicted upon him would deter others in similar circumstances from a similar conduct, lest they should incur a similar fate. Thus it appears that a necessary agent is the proper subject of disapprobation, blame and punishment. To affirm that suffering applied to necessary agents, is not, properly speaking, punishment, which always supposes free agency, meaning, by this philosophical liberty, is begging the question.

CASE III. An intelligent agent may be supposed to be governed in his choice sometimes by a regard to motive, and sometimes
by

by the self-determining power. This is the situation in which man is by the libertarians commonly supposed to be placed*.

Now in this case it is manifest, from what has been already proved, that precisely to the degree in which an agent so heteroclite would be subject to the influence of motives, and no further, he would be susceptible of moral discipline, and the proper object of approbation or disapprobation, praise or blame, reward or punishment. But wherever the self-determining power begins, moral discipline ends. Philosophical liberty and moral government are incompatible with each other.

From the preceding analysis of the moral sentiments of approbation, praise, reward, disapprobation, blame, and punishment, it is evident that a belief in the power of the agent to have acted differently in the same circum-

* It is not in itself probable, nor at all agreeable to the analogy of nature, that a being so heterogeneous in its constitution, and governed by laws so diametrically opposite as those of liberty and necessity, motive and no motive, should exist. An order of beings so constituted, would be exactly similar to one in which it should be the established law of their nature to be sometimes rational, and sometimes insane.

stances,

stances, is by no means necessary to their existence and beneficial effect. A confused notion of such a power as this, arising from want of due attention to, or the correct recollection of, all the previous circumstances, does indeed often attach itself to these sentiments; but it is unfounded in fact, and, like other popular delusions, vanishes before the light of reason and truth*.

IV. THE DOCTRINE OF PHILOSOPHICAL LIBERTY IS ABSOLUTELY INCONSISTENT WITH THE PRESCIENCE OF GOD.

A contingent event depending upon the choice of an agent whose volitions are formed by a self-determining power, independent of motive, having no certain or necessary connexion with previous circumstances, must consequently be uncertain till the previous volition which ordains its existence actually takes place. Till that instant it either may, or may not, come to pass.

Therefore certainly to foreknow a contingent event, which is in other words to know that a future contingent event will certainly

* Priestley's Disquisitions, sect. vii.

take place, would be the same as to know that an event which is in its own nature uncertain, is at the same time certain, that is, to know a thing to be what it is not; which is a contradiction in terms.

Philosophical liberty, therefore, is absolutely inconsistent with the attribute of foreknowledge.

To say that the mode of the divine knowledge is infinitely different from and superior to that of human beings, and therefore that it may extend to future contingencies, is nothing to the purpose. The knowledge of God is indeed infinite both in extent and in degree, and surpasses all comprehension. But it can only extend to those things which are the objects of knowledge. It cannot include contradictions; he cannot know a thing to be what it is not. Contingency and prescience must therefore be incompatible.

If it be urged that contingent events, though not necessary, may nevertheless be CERTAIN; this is plainly inconsistent with the definition of contingency, as has been already proved. But, admitting the fact, all is conceded for which the necessarians contend. If all events
are

are certain, that certainty must have a cause; and this cause, known or unknown, they call necessity*.

VII. THE DOCTRINE OF PHILOSOPHICAL LIBERTY LEADS TO ATHEISM, as it saps the

* "It must be granted," says Dr. Reid, "that as "whatever was, certainly was, and whatever is, certainly "is, so whatever shall be, certainly shall be. These are "identical propositions, and cannot be doubted by those "who conceive them distinctly. I grant, therefore, that, "from events being foreseen, it may be justly concluded "that they are certainly future." — Reid on the Active Powers, page 348.

This single concession oversets all the learned professor's reasoning or rather his declamation against the doctrine of necessity, unless any one is prepared to maintain that an event which is *certainly future* may possibly *not come to pass*. "But this," to adopt a phrase of Dr. Reid's upon another occasion, "it would require "much strength of countenance to profess." If voluntary actions are certainly future, it can be ascribed to no other cause but to the definite influence of motives in definite circumstances, unless the will is bent by some external force, which is what no philosopher will assert. The actions of a being who in the same circumstances can form different volitions, can never become certain till the volition itself is formed; a fact to which the advocates for liberty and prescience do not sufficiently advert.—Edwards on the Will, part ii. sect. 11, 12. Clarke against Collins, page 38—40. Reid on the Active Powers, essay iv. ch. x.

foundation

foundation of the principal argument to prove the existence of God.

For, if a given volition is not produced by motive, nor by an antecedent volition of the agent, it must rise of itself, that is, it must begin to exist without any proper cause. But if a volition may begin to exist without a cause, a planet, a system, or even the universe, might have begun to exist without a cause. Consequently there would be no ground from the works of nature to infer the existence of an intelligent, powerful, and benevolent author*.

VIII. PHILOSOPHICAL LIBERTY IS INCONSISTENT WITH MORAL PERFECTION in any being, and particularly with the necessary rectitude of God.

1. The progress of an imperfect moral agent in virtue is in exact ratio to the improvement, establishment, and ascendancy of virtuous principles, and habits. The more direct, constant, and uncontrollable the influence of these principles and affections upon the choice, the less inclination and the

* Hartley on Man, vol. ii. page 67, octavo; 347, quarto.

Corresp. of Price and Priestley, page 294, 295.

less power there is to resist the feelings of justice and truth, benevolence and piety, the nearer does the character approach to perfection. When therefore these principles and feelings become absolutely and in all cases predominant, so that the mind cannot even will any thing contrary to virtue, the character has attained the highest summit of moral excellence. But the doctrine of philosophical liberty asserts, that when the character has reached this state it instantly ceases to be virtuous, it loses all moral quality, and becomes perfectly neutral. The conclusion is exactly similar in the progress of vice. The greater the ascendancy of vicious principles and bad passions the worse the character, till they have acquired an absolute dominion over the will, when the character instantly loses all moral quality, and becomes perfectly neutral, and thus rises to a level with that which is governed uncontrollably by benevolence, justice, and piety. This consequence is evidently absurd; therefore the doctrine of philosophical liberty cannot be true.

2. Philosophical liberty is inconsistent with

272 OBJECTIONS AGAINST LIBERTY.

with the necessary rectitude of the Supreme Being.

It is the glory of God that he is necessarily wise, just, and benevolent. It is as impossible that he should act inconsistently with truth, rectitude, and goodness, as that he should cease to be. Liberty of choice, or a power of choosing to act in contradiction to the rules of justice and wisdom, would be the greatest imperfection, and the belief of it would be an endless source of anxiety and disquiet to his intelligent, and especially to his virtuous creatures. It is indeed a contradiction in terms; for to ascribe philosophical liberty to God in any other sense than the choice of equal objects, which is no moral quality, would be the same as to say that perfect wisdom may act foolishly, that perfect rectitude may act unjustly, and that perfect benevolence may be cruel and malignant; than which nothing can be more absurd.

This is so evident a case that it is admitted in the most distinct and decisive language by the advocates for liberty themselves*. But they

* "The most perfect being," says Dr. Reid, (*Active Powers*,

they qualify the concession by asserting that the necessity for which they plead is not physical but moral. God is good by necessity; but not by the same necessity by which he exists, though equally certain in its effect.

This

"Powers, p. 292.) always infallibly acts according to the best motives; for it is a contradiction to say that a perfect Being does what is wrong or unreasonable." What is this but to say that it is a contradiction to ascribe philosophical liberty to God?

The Doctor adds: "Moral perfection does not consist in having no power to *do ill*." Certainly not, but in having no power to *will* what is evil. God may do ill *if he please*, but it is his glory that he cannot choose it.

Dr. Clarke says, (Boyle's Lect. fol. vol. ii. p. 51. Dem. prop. 12.) "Though all the actions of God are entirely free, yet these moral attributes are really and truly necessary by such a necessity as, though it be not at all inconsistent with liberty, yet is equally certain, infallible, and to be depended upon, as even the existence itself or the eternity of God." Again, p. 52. "It is as truly and absolutely impossible for God not to do, or to do any thing contrary to, what his moral attributes require him to do, as if he was really not a free but a necessary agent."

Philosophical liberty is the power of choosing differently, the previous circumstances remaining the same; and this liberty it is evident that Dr. Clarke denies to the Deity: his doctrine therefore coincides with that of the necessarians.

T

"It

This is all for which the necessarians contend. If it is allowed that the divine mind is so determined in its choice of the wisest and the best, that the Supreme Being could not in any instance *will* otherwise than he does, they are perfectly indifferent whether the necessity which thus uniformly governs the divine will, be called physical or moral:

"It may be infinitely more depended upon," says Dr. Price, "that God will never do wrong, than that the wisest created being will not do what is most destructive to him without having the least temptation to it. There is in truth equal impossibility, though not the same kind of impossibility, that he who is the abstract of all perfection should deviate into imperfection in his conduct, infinite reason act unreasonably, or eternal righteousness unrighteously, as that infinite knowledge should mistake, infinite power be conquered, or necessary existence cease to exist."—Price's Rev. of Morals, p. 430, 431.

What can a necessarian say more than this? What liberty is allowed by these writers to the Supreme Being, but the power, not of choosing differently, which would be philosophical liberty, but that of doing what he pleases? a power which no necessarian denies.

The Doctor adds, "What good reason can there be against calling one a moral, the other a natural impossibility?" I see none; but let it be remembered that both are equally inconsistent with natural liberty.

the

OBJECTIONS AGAINST NECESSITY. 275

the latter perhaps is the more proper phrase, to distinguish this species of necessity from that which is involuntary.

It may be said that the exclusion of philosophical liberty, from the divine mind does not absolutely prove that his creatures are also necessary agents. True, but it proves two important points. First, that liberty is an imperfection ; and, secondly, that it is not essential to virtue.

SECTION VII.

Objections against Philosophical Necessity stated and answered.

THERE are two ways of obviating objections. The first, and the most direct, is by proving that they do not apply to the doctrine in question. The second, is by retorting the objection, and showing that it holds with equal or superior force against the contrary hypothesis, so as to leave only a choice of difficulties. In one or other of these methods all the objections against philosophical necessity may be satisfactorily repelled.

276 OBJECTIONS AGAINST NECESSITY.

OBJECTION THE FIRST.

The doctrine of necessity is reducible to an absurdity. For, if action is constantly conjoined with motive, a man urged by equal motives to go in different directions would, by the laws of motion, be necessitated to advance neither in one direction nor the other, but in the diagonal of both; which is contrary to experience*.

ANSWER.

The motives in question are either equal or unequal; if equal, by the principles of necessity no volition can take place; if unequal, the greater motive will prevail†.

* This is the substance of the objection which Dr. Gregory has urged in two ponderous volumes with all the parade of mathematical demonstration, and with a spirit of arrogance and insult, by no means warranted either by the force, or the novelty of his argument, and which does little credit to the author either as a philosopher or a polite writer.

† Gregory's Essay, vol. ii. sect. 9, 10.
Crombie on Necessity, chap. iii.

OBJEC-

OBJECTION THE SECOND.

If the doctrine of necessity be true, mankind are under a perpetual and unavoidable delusion, inconsistent with the moral perfections of God; for all men believe, and cannot but believe, that they possess liberty of choice.

ANSWER.

1. The ideas of men in general extend no further than to practical liberty, or the power of doing what they please*.

2. Superficial views of human nature lead men to believe that they could have acted

* Ask a day labourer, Could you have abstained from going to work this morning? he will answer, Yes, I could have staid at home if I pleased. That is, if I had willed to have staid at home, I could have done so. But this is external liberty; the only liberty of which the labourer has any idea. For, if the inquirer further asks, Could you have staid at home while you retained the same inclination to work, and the same reason for going abroad? If he understands the question, he will certainly reply, That without *changing his mind*, that is, without an alteration either of inclination or reason, he could not have abstained from going to his work.

T 3

differently

differently in the same circumstances; but this error is easily rectified by a close attention to the process of the mind in its voluntary acts.

3. The notion, that in any past circumstances we might have chosen differently, arises entirely from our not recollecting with exact precision all the motives by which the volition was influenced, and the actual situation in which the mind was placed; so that the pretended consciousness of free-will amounts to nothing more than forgetfulness of the motive.

4. The error into which superficial observers fall with respect to philosophical liberty is perfectly analogous to that into which unlearned persons are led with respect to the solar system; both are occasioned by superficial views of obvious appearances, both are corrected by more attentive observation. Neither are attended with any material practical inconvenience; nor can it be justly regarded as any impeachment of the moral character of the Deity that his creatures should be liable to errors of this kind, unless it could be proved that the truth of
God

God obliges him to make all his creatures omniscient and infallible.

5. Vicious inclinations sometimes hurry men into the commission of crimes which their better judgement disapproves, and against which, even at the time, it strongly remonstrates: this occasions an inward self-upbraiding, which embitters vicious pleasure, and to which is given the name of disapprobation, shame, and remorse. But though this state of mind demonstrates the strength and the malignity of the vicious inclination, it by no means proves that while the habit or affection remains in its present force, the choice could have been different.

When men who have been guilty of crime review the action in calmer moments, when the strength of passion has subsided, and the contrary motives appear in all their force, and perhaps magnified by the evil consequences of their vice and folly, they are ready to think that they might at the time have thought and acted as they now think and act: but this is a fallacious feeling, and arises from their not placing themselves in circumstances exactly similar. And it is also

280 OBJECTIONS AGAINST NECESSITY.

a dangerous conclusion ; for, if it leads them into scenes of similar hazard, in the delusive hope that it will be in their power, in the same circumstances, to act otherwise, they will inevitably repeat the crime, and confirm the tendency to vice.

OBJECTION THE THIRD.

The doctrine of necessity is inconsistent with all proper agency ; it annihilates virtue and vice, merit and demerit.

ANSWER.

This objection is entirely verbal. If in the definition of proper agency, virtue, merit, and the like, philosophical liberty, be included, necessity must of course be inconsistent with it. But if by proper agency be meant, the possession of rational, voluntary, and active powers ; if virtue be defined a course of action flowing from the love of God and our neighbour, and tending to the greatest ultimate happiness ; and if vice be defined a system of affections and course of conduct which tends to ultimate misery, and the like ; it is plain that these distinctions are perfectly

perfectly consistent with philosophical necessity*.

OBJECTION THE FOURTH.

The doctrine of necessity is inconsistent with moral discipline, and with the justice of future reward and punishment.

ANSWER.

This case has been already considered (Sect. VI.), and it has been shown that upon the principles of necessity there is a real use in moral discipline, and an inseparable connexion between virtue and happiness, vice and misery; whereas the doctrine of liberty makes all discipline useless and nugatory. Necessity is the only rational ground upon which the doctrine of future rewards and punishment can be justified, because it is the only supposition upon which they can appear to be of any use. This hypothesis therefore adds to the credibility of the scripture doctrine

* Hartley, p. 301, 4to.

upon

282 OBJECTIONS AGAINST NECESSITY.

upon this subject, while that of liberty is inconsistent with it, and subversive of it. Upon the necessarian system, indeed, all evil is remedial, and the pains even of a future life are to be inflicted for the benefit of the sufferer himself, as well as for the admonition of others: but this the necessarians regard as so far from being an objection to their hypothesis, that it is a considerable presumption in its favour. Nor is this doctrine contradictory to what the scriptures teach concerning the final state of mankind and the ultimate issue of the divine dispensations. See I Cor. xv. 23. 28.*

OBJECTION THE FIFTH.

The doctrine of necessity confounds natural and moral qualities; upon this hypothesis both are constitutional and unavoidable. To be beautiful, is as meritorious as to be benevolent, and it would be as wise and

* Edwards on the Will, part iv. sect. 3, 4.

Price and Priestley, p. 149. 155.

Palmer against Priestley, sect. 7.

Priestley's Reply, p. 79.

as just to punish a man for being deformed,
as for committing a theft.

ANSWER.

This objection nearly coincides with the third, and is altogether verbal. Natural and moral qualities are indeed equally necessary; but the latter being voluntary, and the former involuntary, they require the application of means proportionably different either to produce or to correct them. Motives operate in one case, and physical causes in the other. If exposing the body to pain would correct deformity, which indeed sometimes happens, it would be reasonable to apply pain as a remedy for natural defects; and if the use of cosmetics would make a man benevolent and wise, extreme attention to personal decoration would cease to be the characteristic of a fop.

OBJECTION THE SIXTH.

The doctrine of necessity is an encouragement to vice. It tranquillizes the mind of guilt, and supercedes all motives to repentance.

284 OBJECTIONS AGAINST NECESSITY.

pentance. Why should a man repent of what he could not avoid? Why not rejoice in conduct which, however malignant in principle or mischievous in its immediate consequences, will ultimately conduce to the greatest possible good, and is indeed, according to this hypothesis, an essential part of the best possible system?

ANSWER.

The question simply stated is this: Whether the doctrine of necessity lays a proper foundation for repentance, and supplies sufficient motives to it?

REPENTANCE is a change of mind from vice to virtue, and the sentiments which usually combine to produce it are Remorse, Sorrow, Shame, and Fear.

REMORSE is the exquisitely painful feeling which arises from the belief that, in circumstances precisely the same, we might have chosen and acted differently. This fallacious feeling is of course superseded by the doctrine of necessity.

This sentiment, however, is of little practical value. A patient suffering under a fever

is

is not influenced to seek for a remedy because he believes that he might have avoided taking the cold which produced the disease, but because he desires to be relieved from his present pain, and is apprehensive that if the disorder is not removed, death will ensue. By parity of reason, a man seeks a remedy for vicious habit, the malady of the mind, not because in the same circumstances he might have avoided contracting it, but because he desires to be delivered from present misery, and is fearful that, if vice be not eradicated, it will tend to still greater and more insupportable distress.

SORROW is a painful feeling which arises from the disordered state of the mind under the dominion of vice: it naturally prompts to repentance, and is perfectly consistent with the doctrine of necessity.

SHAME is an uneasy sensation excited by the apprehension, recollection, or imputation of any thing which is regarded as unworthy of the person who is the subject of it, or which tends to expose him to disgrace and infamy. A belief in the possibility of avoiding the causes of shame has no concern in
the

the production of that painful emotion. Men are often ashamed of loathsome and offensive diseases, though constitutional or accidental. And persons of refined feelings are ashamed of dishonourable conduct in any who are related to them, or any way connected with them, though they have done all that was in their power to prevent it. Upon the same principles a man may be ashamed of a vicious action as mean and degrading, and what if known will expose him to reproach and infamy, though, with the same habits of mind and in the same circumstances, he could not have chosen otherwise.

FEAR is excited by the apprehension of future probable evil. ABHORRENCE is a mixture of fear and hatred. These are feelings for which the doctrine of necessity lays a proper foundation, and the genuine effect of which is to reclaim men from the practice of vice, and to diminish the influence of vicious habits; that is, to produce repentance.

The doctrine of philosophical necessity teaches that in the same circumstances men will invariably act in the same manner:
hence,

hence, if they are sincerely desirous of repentance and a change of mental habits, they will see the necessity of avoiding temptation. This doctrine also places personal virtue in principle, habit, and character, which is inconsistent with the expectation of sudden conversions, and even with the possibility of death-bed repentance : and, as it has been already observed, by confirming the credibility, it strengthens the moral efficacy of the doctrine of future punishment.

These advantages are appropriate to philosophical necessity : the doctrine of liberty, if pursued to its genuine consequences, leads to presumption, to fallacious expectation, and to religious scepticism.

So far as the objection relates to moral evil as the appointment of God, and forming an essential part of a system upon the whole the best, the objection is not peculiar to necessity, but holds equally against the doctrine of liberty and prescience, as will hereafter be proved*. In the mean time it is sufficient to observe, that moral evil being utterly inconsistent with the happiness of the agent, he must know that

* See the answer to the eighth objection.

whatever use the wisdom of providence may ultimately make of his crimes, they will prove to himself a source of exquisite misery*.

SECTION VIII.

Objections continued.

OBJECTION THE SEVENTH.

The doctrine of philosophical necessity discourages all attempts for the reformation of others. "If every intention and action of
 " my life is fixed by eternal laws which I can
 " neither elude nor alter, it is as absurd to say
 " to me, You ought to be honest to-morrow, as
 " to say, You ought to stop the motion
 " of the planets to-morrow†."

ANSWER.

It is universally allowed by all who admit the divine foreknowledge, that certainty of event does not preclude the use of means. If ends are predestinated, the means necessary to the accomplishment of those ends are equally

* Dawson's Necessitarian, passim.

Palmer against Priestley, sect. 6.

Priestley's Reply to Palmer, sect. 6.

† Beattie on Truth, page 353.

OBJECTIONS AGAINST NECESSITY. 289

predestinated. So far the objection holds as forcibly against liberty and prescience as against necessity ; or, rather, it has no force against either hypothesis. But to maintain that a being upon whom definite motives invariably produce a definite effect, is for that reason an improper subject for exhortation, that is, for the application of motives, while motives may with propriety be addressed to a being who is indifferent, or superior to them, is palpably absurd. It is the same as to maintain that it is wrong to chastise the child A, for telling a falsehood, because such discipline will infallibly prevent him from repeating the fault ; but it is very proper to correct the child B, because, he being independent of all motive, it is very uncertain whether correction will produce any good effect : or, rather, if he is, strictly speaking, a free agent, it is certain that it can produce no effect at all.

OBJECTION THE EIGHTH.

The doctrine of philosophical necessity makes God the only proper agent in the universe, and the author of all evil both natural and moral.

290 OBJECTIONS AGAINST NECESSITY.

ANSWER.

1. The doctrine of philosophical necessity does not make God the APPROVER of evil, nor represent him as choosing it for its own sake.

2. This doctrine supposes that a certain quantity of evil, natural and moral, was unavoidable in a system upon the whole most worthy of the Supreme Being, and eventually productive of the greatest good. In this view God may be said to be the AUTHOR of evil; he permitted and appointed it by placing his creatures in circumstances of which natural and moral evil were the necessary and foreseen result.

3. The doctrine of liberty and prescience is open to the same difficulty. All who admit these principles must, if consistent with themselves, allow that the Deity has placed his creatures in circumstances, the foreknown, certain, inevitable, and therefore *intended* consequence of which, was the introduction of natural and moral evil.

To say that the creatures of God might in every particular instance have avoided vice, is frivolous, and groundless. How could

could that be avoided which was foreknown as a certain event ?

To argue that foreknowledge had no influence over the event, which would have happened with equal certainty if it had not been foreseen, is nothing to the purpose. The prescience of a mere SPECTATOR implies indeed nothing more than certainty of event, in the production of which, the spectator as such hath no concern. The prescience of an AGENT is materially different. Every intelligent being must mean to produce that effect which he foresees will be the certain consequence of his own voluntary act. The Supreme Being, therefore, is in this sense the author of evil, upon the hypothesis of liberty and prescience, as much as upon the principle of necessity. The distinction attempted to be made in this case between permission and appointment, is altogether verbal*.

4. The scriptures both of the old and new Testament represent the Deity as the author of evil in the sense already explained. Isaiah xiv. 7. Amos iii. 6. Rom. ix. 18.

* Correspondence of Price and Priestley, p. 416, 417.

5. That God is in this sense the author of evil, will not justify his creatures in violating the rules of virtue, and doing evil under pretence of accomplishing a greater good. It is not unjust in the Deity to expose any of his creatures to a limited degree of evil, as the best means of accomplishing his own benevolent purposes; for God is the sovereign proprietor of all, and may dispose of his creatures as he pleases without being accountable to any, nor have they any claim upon their Maker further than this, that existence shall not be eventually a curse. It is also in his power to make ample and infinite compensation for whatever temporary evils they may endure. But it does not therefore follow that a being whose character is imperfect, and whose views are limited, is at liberty to inflict upon a fellow-being, over whose existence and happiness he has no inherent authority, a portion of evil which it is not in his power to redress or to compensate, in order to obtain what he presumes to call a greater good, but of which he is neither competent nor authorised to judge. To plead the example of the Deity in a case so totally dissimilar

diffimilar as not to afford the slightest analogy, is folly and impiety in the extreme.

6. If the introduction of evil be really contrary to the divine intention, as contradiction to the will of any being necessarily produces uneasiness, and moral evil is infinitely odious to the Deity, God must be infinitely unhappy.

7. To deny, or to limit the prescience of God leads to consequences so absurd, and so dishonourable to the Supreme Being and his government, and is so directly contradictory to the whole tenor of divine revelation, and subversive of its principal evidence, that it affords a strong presumption against the truth of a hypothesis of which this is the necessary or the probable consequence. Upon the whole, therefore, the advocates for philosophical liberty are reduced to the dilemma, either of denying the foreknowledge of God, and thus robbing the Deity of one of his most glorious attributes, or of admitting that God is the author of evil, in the same sense and in the same degree, in which this doctrine is charged upon the necessarians*.

OBJECTION

* Edwards on the Will, part iv. sect. ix.

294 OBJECTIONS AGAINST NECESSITY.

OBJECTION THE NINTH.

The doctrine of necessity is inconsistent with the veracity of God, in the declarations and promises, the invitations and the threatenings, of the scriptures.

ANSWER.

1. The difficulty, if any, is equally great upon the hypothesis of liberty and prescience: for, how can the creatures of God act otherwise than as he foreknows? Why then invite them to repent, or tantalize them with promises? The objection, therefore, is not peculiar to the doctrine of necessity.

2. Expressions implying the existence of human passions in the Divine Being, such as anger, sympathy, and the like, cannot be understood literally without an anthropomorphism almost as gross as it would be to suppose that God had eyes, and ears, and hands. The scriptures being intended for the use of the unlearned, the language, of them is adapted

Priestley's Illustrations, sect. 10.

Palmer against Priestley, sect. 10.

Priestley's Reply, sect. 10.

to popular conceptions, and is not to be taken in a gross literal sense.

3. All that can be admitted as philosophically true by persons of reflection is, that evil natural or moral, as such, is not pleasing to God; that he takes no delight in seeing or making his creatures miserable; that moral evil if persisted in will infallibly entail natural evil, that is punishment; and that virtue shall in the end be crowned with happiness.

4. Exhortations, invitations, promises and threatenings addressed to necessary agents operate as motives to deter from vice, and to excite to the practice of virtue. But, when applied to beings who possess a self-determining power, they are of no use any further than as such beings may be influenced by motives, that is, when the self-determining power is superseded*.

OBJECTION THE TENTH.

The doctrine of philosophical necessity involves predestination and fatalism, discourages

* Edwards on the Will, part iii. sect. 4.

Priestley's Illustrations, sect. 11.

Palmer against Priestley, sect. 11.

296 OBJECTIONS AGAINST NECESSITY.

exertion, and tends to produce universal torpor and inactivity.

ANSWER:

1. This objection cannot be urged by the advocates for liberty and prescience, as it presses upon their own hypothesis with equal force; for prescience necessarily includes certainty of event.

2. Whatever certainty may belong to events themselves, our ignorance of futurity will and ought to operate upon us in the same manner as if there was a real uncertainty in the nature and order of things.

3. If ends are fixed and necessary, the means of accomplishing those ends are likewise necessary; and if voluntary action is perceived to be a necessary link in the chain of causes, this perception will operate as a motive to exertion in the agent who desires the end, and in proportion to the intensity of that desire. At any rate, no being who knows that the accomplishment of ends depends upon the intervention of voluntary acts, can be so senseless as to expect the end where the necessary means are not applied.

4. Daily

4. Daily observation proves that the firmest belief in the certainty of event does not abate the vigour of exertion. Necessarians and predestinarians are not in fact more indolent than other men. The farmer who believes that God knows, and has ordained that the next harvest shall be plentiful, or otherwise, does not for that reason neglect to cultivate and to sow the ground. Nor does the almost universal persuasion that the time and circumstances of dissolution are irrevocably fixed for every individual, lessen men's exertions for the preservation of life*.

SECTION IX.

Recapitulation and General Observations.

FIRST, CONCERNING PHILOSOPHICAL LIBERTY.

1. Philosophical liberty, so far as it consists in a power of choosing where motives are equal, is undoubtedly a perfection; and

* Edwards on the Will, part iv. sect. 5, 6, 12.

Priestley's Illustrations, sect. 8—12, and appendix.

Palmer against Priestley, sect. 8, p. 146, &c.

Priestley's Reply, p. 83, &c.

as it cannot be proved to involve a contradiction, I do not see how it can be denied of the Supreme Being. Without it he could not act, if a case should occur, which none can prove to be impossible, and which indeed does not seem to be improbable, in which it would be necessary to adopt one out of two or more equal modes of action, or not to act at all.

2. Liberty in this case is not a moral excellence; it is mere power, and bears no more relation to rectitude than the power of moving a limb. God is not more just, more wise, nor more benevolent, because he possesses a power of selecting one out of two or more equal systems, in preference to absolute inaction. Nor can it be proved that philosophical liberty, in any circumstances, is a moral quality.

3. Admitting that liberty of choice out of equal things is an attribute of God, it plainly follows, that every argument adduced to prove liberty, in this sense of it, to be a contradiction, or to imply the existence of an effect without a proper cause, is fallacious. For this argument, if it proved any thing, would prove the impossibility of liberty in all cases
and

and in all beings; and it would extend to the Deity equally with all other intelligent agents.

4. If it should be granted that this liberty of indifference exists in the Supreme Being, there appears no reasonable ground for denying the possibility of its being communicated to the intelligent creatures of God. But this possibility, if conceded, will by no means prove that such a power has actually been communicated to any; much less that the possession of it is essential to moral agency and responsibility.

5. The increasing difficulty of determining the choice in proportion to the apparent approximation of motives to equality, renders it probable that the power of choosing where motives are perfectly equal, is not an attribute of the human mind. Nor can it ever be proved that a choice has in any instance been actually made, where the motives have been exactly balanced.

6. The existence of philosophical liberty in human agents is favoured by superficial views of human nature: and persons not conversant with the controversy, if taken by surprise, when the question is first proposed,

will generally decide in favour of liberty. This, in the language of the Scotch philosophers, is the appeal to common sense; the dictates of which, according to their system, are authoritative and infallible. Indeed most of the advocates for philosophical liberty appeal to this fact, as proving an instinctive consciousness of liberty, implanted by the Supreme Being in the human mind; to contradict which is to insult the moral attributes of God. Yet so very superficial is that view of human nature upon which this boasted argument rests, that, if the question be proposed with any tolerable degree of correctness and precision, the reply will be almost uniformly favourable to the doctrine of necessity.

7. The notion of philosophical liberty seems to be countenanced by the popular language of the scriptures, taken in the literal sense: and so is anthropomorphism; for the scripture speaks of the eyes, the hands, and the ears of God, and of his moving from place to place. It also ascribes human affections, such as anger, grief, joy, repentance, and the like, to the Supreme Being. But it has been shown, that all these objections press with equal weight upon the hypothesis which

combines liberty and prescience, and the answer which serves to repel them in one case will hold equally good in the other. So that the libertarian, to avail himself of these objections, must deny the foreknowledge of God.

8. The power of choosing without motive, or in opposition to the strongest motive, is so evidently contrary to universal experience, that many modern advocates for liberty have conceded this point to the necessarians, and represent this view of the doctrine as false and unjust. Others, more consistently, extend the dominion of the self-determining power to every voluntary act. If liberty be limited to the choice of equal things, without any preponderating motive, admitting that such a case never occurs, the power would be nugatory; but if in any instance a choice should be made where the motives were perfectly equal, the exercise of liberty would be absolutely inconsistent with the certainty of divine prescience; for the event, and all succeeding events depending upon it, could not become certain, and therefore could not be certainly foreseen till the option actually took place.

9. Hence

9. Hence it follows that the principal argument in favour of moral necessity, and that the insurmountable objection against the existence of philosophical liberty, in any degree, and under any restrictions whatever, arises from the prescience of God. Liberty and prescience stand in direct hostility to each other. A philosopher, to be consistent, must give up one or the other. They are mutually and essentially contradictory, and the contradiction respects not the *mode* of the divine foreknowledge, of which we have no conception, but the *object* of it, which we distinctly comprehend. An event cannot at the same time be both certain and uncertain. If it certainly will come to pass, it is absurd to say that it may possibly not take place. To affirm that these things, though very mysterious, are nevertheless capable of being reconciled we know not how, is exactly the same as it would be to affirm that three and two may make six, though we know not how. A contradiction is a self-destructive idea, and can have no objective existence. Such are the ideas of contingency and foreknowledge.

10. The

10. The liberty of indifference, or the power of choosing out of objects perfectly equal, if men were endued with it, would be no moral quality, nor would it have any relation to moral conduct. The actions proposed are by supposition equally eligible in themselves, and equally the objects of desire antecedent to the actual choice. An election in such circumstances can possess no moral value. Much less can such a power as this lie at the foundation of all moral conduct, and be essential to moral agency and moral discipline.

SECTION X.

Recapitulation continued. — General Observations concerning the Doctrine of Philosophical Necessity.

SECONDLY, CONCERNING PHILOSOPHICAL NECESSITY.

1. The doctrine of philosophical necessity agrees best with the most accurate observations upon human nature, and affords the easiest solution of its most difficult and curious phenomena.

It

It accounts for the uniform influence of motives, for the impossibility of choice where motives are wanting, and for the increasing difficulty of choosing in proportion as motives approach to equality.

Philosophical necessity is the only theory which is reconcilable to the existence of virtue, and of moral obligation: in connection with the theory of association, of which indeed it is an essential part, it well accounts for the phenomena of habit in general, and of moral habits in particular; and it lays the only proper foundation for moral discipline. The judgments which men form, and the language which is commonly employed to express the merit or demerit of action and character, is intelligible and correct upon the hypothesis of necessity, but improper and unmeaning when applied to agents philosophically free.

2. The doctrine of necessity is most honourable to the Deity.

It is the glory of the Supreme Being to be a necessary agent, that is, to be invariably influenced in all his counsels, and in all his works, by the best affections and the most honourable and beneficent designs; or, in
other

other words, to be uniformly governed by the dictates of infinite goodness, and infinite wisdom, in every choice where there is any difference in the object, or the least foundation for preference. Whether the Deity may not also possess a power of choosing one out of a number of objects perfectly equal, has been already considered. But this power, if it exists, is by no means inconsistent with the uniform influence of benevolence and wisdom, wherever there may be a real difference however minute in the objects of choice*.

The necessary agency of created beings, and the certainty of event resulting from it, constitute a proper foundation for certainty of foreknowledge, which is absolutely incompatible with philosophical liberty, under every limitation, and in every degree.

3. The doctrine of philosophical necessity affords a proper solution of those phenomena which have been commonly urged as most favourable to the hypothesis of liberty, if not decisive of its truth.

In the supposed choice out of equal things,

* Clarke on the Attributes, prop. xii.

the mind in its preference is determined by considerations so trivial that they are instantly forgotten if they are not at the time vigilantly marked.

The popular opinion, that in many cases it was in the power of the agent to have chosen differently, the previous circumstances remaining exactly the same, arises either from a mistake of the question, from a forgetfulness of the motives by which our choice was determined, or from the extreme difficulty of placing ourselves in imagination in circumstances exactly similar to those in which the election was made.

4. The principal objections against the doctrine of necessity, are such as may be urged with equal force against the hypothesis of liberty combined with the doctrine of the divine prescience ; and the same solution which applies to one case is equally applicable to the other. At any rate the doctrine of necessity is not alone responsible for a difficulty which presses with equal force upon the opposite hypothesis.

That God is the only proper agent in the universe, that he is the author of evil natural and moral, that he is insincere in the offers of

mercy, and unjust in the punishment of vice ; that all characters and all events are predestinated, and that the doctrine tends to produce indolence, fatalism, and licentiousness; of these objections it has been shown, that the greater number are founded in ignorance, that they are more formidable in appearance than in reality, and that all of them apply with equal effect to the combined doctrines of human liberty and divine prescience, as to the doctrine of philosophical necessity, so that the same answer will serve for both.

It is always to be remembered, that the prescience of an agent necessarily includes predestination, though that of a spectator may not. It is nonsense to say that a being does not mean to bring an event to pass which he foresees to be the certain and inevitable consequence of his own previous voluntary action.

5. The difficulties peculiar to the doctrine of necessity are more easily obviated than those which are peculiar to liberty.

The doctrine of philosophical necessity supercedes remorse, so far as remorse is founded upon the belief that in the same previous circumstances it was possible to have acted otherwise. But remorse is not repentance, nor es-

sential to it. And the error upon which it is founded is pernicious in proportion as it diminishes moral vigilance, and seduces men into scenes of danger.

Necessity is charged with confounding natural and moral qualities, both being equally necessary, and therefore equally meritorious. But natural and moral qualities, though equally necessary, are no more identical than colour and sound. And by the established use of language, the words merit and demerit are limited to those mental affections and voluntary actions, which are productive of happiness or misery, and which are capable of being cherished or restrained by the application of suitable motives, by praise or blame, by reward or punishment.

The doctrine of necessity countenances the expectation of the ultimate restoration of all the rational creatures of God to virtue and to happiness. Nor is this expectation, so dear to every virtuous and benevolent mind, contradicted either by the phenomena of nature or the declarations of revelation. This conclusion, however, does not follow from the principles of necessity by direct and inevitable consequence. All that these principles

4

ciples

ciples certainly prove is, that under the wise and just government of God, the gift of existence, whether for a longer or a shorter period, whether finite or infinite, will not eventually prove a curse to any of his creatures.

Upon the theory of necessity, the complex ideas of praise and blame, reward and punishment, are corrected, at least so far as to exclude the useless and unfounded notion of the possibility of having chosen differently in circumstances precisely similar; and likewise the absurd supposition of intrinsic merit or demerit of actions independent on their consequences. But in all other sciences, as well as in metaphysics and morals, popular notions must be corrected by the more accurate judgments of those who think profoundly and philosophically. And it has been proved to demonstration that the principles of necessity, and those alone, lay a proper foundation for mental discipline and moral government.

Necessity has been charged with a tendency to generate presumption and licentiousness. It has been said, that God cannot punish what man cannot avoid. But if

all evil is remedial, which it must be upon the system of necessity, and if all punishment is unjust which is not beneficial in its tendency, either to the individual or to the public, it cannot be unjust to inflict that degree of suffering upon an offending creature, which may be necessary to produce repentance and reformation in himself, and to make his example an awful warning to others. It is therefore the glory of the doctrine of necessity, that it demonstrates the inseparable connexion between moral and natural evil, and proves that by the established course of nature every vice shall be followed by adequate punishment.

The objections against the hypothesis of philosophical liberty are far more difficult of solution than those against the doctrine of necessity. If the prescience of God be admitted in connexion with liberty in moral agents, it involves a palpable contradiction; and this hypothesis is exposed to all the difficulties which are regarded as most formidable in the theory of necessity. But if prescience be denied, the Supreme Being is robbed of one of his most glorious attributes; confusion and misery are introduced into the divine government; the foundations of revelation are
sapped,

fapped, and the Deity himself is exposed to disappointment, to vexation, and to impotent regret.

6. Some have thought that the doctrine of philosophical necessity, if true, ought to be concealed, because it is difficult of comprehension and liable to abuse.

That some arguments which have been advanced by the advocates of philosophical necessity, and upon which some of its acutest supporters have laid the principal stress, are difficult to be understood, cannot be denied : but the same may be said of the arguments for the existence of God. It will not, however, be readily conceded, that the doctrine itself is obscure and unintelligible, or that the evidence of it is above the capacity of common minds. Nothing surely can be more obvious to a person of the least reflection, than that no voluntary action can be performed or determined upon, without reason or inclination or both, and that there can be no change in the determination or the conduct, without a previous change in the posture of the mind. This state of the question is so very obvious that common language is founded upon it ; and it is not without some difficulty that a

person unused to reflection can be made to comprehend the definition of liberty of choice. It may therefore be said with truth, that the language and the feelings of mankind are in favour of the doctrine of necessity.

But, if the doctrine be true, the diffusion of it can do no harm. It is an established and undeniable principle, that truth must be favourable to virtue. Nor is there any evidence that the necessarians are less virtuous, or worse members of society, or less attentive to discharge the duties of life, than the loudest declaimers for natural liberty.

Nevertheless, many sensible and cautious persons, who are themselves convinced of the truth of the doctrine of philosophical necessity, seem to be unwilling that it should be made the subject of discussion, lest the general belief of it should have a pernicious effect upon the public morals. But this is the kind of language which has always been held by the advocates for established corruptions, and by the enemies to truth and reformation of every kind, and which ought therefore to be suspected by the friends to freedom of thought and inquiry. The same objection was urged against the christian religion at its
first

first promulgation, and against the reformation from popery. But if its futility is apparent when applied to the doctrines of theology, why should it not be regarded as equally futile in its application to metaphysics and morals?

And where can be the practical danger of the doctrine of necessity? It is upon the ground of moral necessity, and upon that alone, that the doctrine of future punishment and reward can be made intelligible or credible, and that the most powerful motives to virtue can be applied to the human mind. At any rate, the doctrine of necessity, if it should become the popular system, cannot be more abused than the notion of liberty very commonly is, by those who act under the delusive presumption that in a situation precisely similar it will be in their power to choose differently: yet who objects for this reason to tell men that they are free agents?

7. The doctrine of philosophical necessity is attended with many beneficial practical consequences,

1. It makes men cautious of venturing into circumstances of temptation, especially if they have at any time been deluded into vice. Their principles teach them that similar causes will

✓ will produce similar effects, as invariably in the moral as in the natural world, and that safety can only be secured by avoiding the scene of danger.

2. The doctrine of necessity leads those who practically adopt it to lay great stress upon moral habits, to be indefatigable in cultivating virtuous affections and principles, and not to presume upon a power of reforming at pleasure, nor to rely upon the efficacy, or even the possibility, of death-bed repentance.

3. The doctrine of philosophical necessity supplies the most powerful motives to virtue, by exhibiting the inseparable connexion between natural and moral good and evil, and by demonstrating the reasonableness, and thus establishing the credibility and increasing the influence, of the scripture account of the rewards and punishments of a future life.

4. The doctrine of necessity, which supposes the intellectual and moral as well as the visible world to be subject to general laws, is the fundamental principle of the philosophical argument for the truth of christianity. For, if the leading facts of the christian religion are not true, the primitive christians, could not, in consistency with the known and established

blished laws of the human mind, that is, they could not without a proper miracle, have acted and suffered as they are credibly reported to have done.

5. The doctrine of philosophical necessity is inseparably connected with that of optimism. It teaches us to see God in every thing, and every thing in God. It directs our regard to the Supreme Being, as the sole agent in the universe; the proper and primary cause of all that happens: it reconciles the mind to all events, leading us to regard them as necessary parts of a great system, which shall eventually produce the greatest possible sum of happiness and virtue, both to the universe and to individuals; and that every pain will have its proper effect in preparing and qualifying the sufferer for ultimate and unlimited felicity.

The hypothesis of liberty which excludes prescience, and which supposes that the Divine Being may be baffled and disappointed by the perverseness of his creatures, fills the reflecting mind with gloom and terror. But upon the principles of necessity nothing can come to pass but what is foreknown and predestinated; nothing but what constitutes an essential part
of

of a system upon the whole the wisest and the best, and what therefore a pious mind may reasonably acquiesce and even rejoice in, as ultimately productive of the greatest good.

6. The doctrine of the necessity of human actions conciliates good will to men. It leads us to regard all men as brethren, as children of the same wise and benevolent parent, who are intended to share in the same everlasting inheritance, and who are gradually training up under various processes of moral discipline, some for a longer and others for a shorter period, till they become qualified for the possession of it. By teaching us to look up to God as the prime agent, and the proper cause of every thing that happens, and to regard men as nothing more than instruments which he employs for accomplishing his good pleasure, it tends to suppress all resentment, malice, and revenge; while it induces us to regard our worst enemies with compassion rather than with hatred, and to return good for evil.

7. The doctrine of necessity suggests the most animating motives to exertion, for the generous purpose of the instruction and improvement of mankind, and especially for the education

education of the young and tender mind in principles and habits of wisdom and piety, of honour and virtue: for, if the influence of moral considerations is as invariable in definite circumstances as that of physical causes, which is the definition of philosophical necessity, we may be assured that no well-directed effort will be lost.

8. The doctrine of philosophical necessity, when it produces its full effect upon the mind, generates self-annihilation, or that complete and habitual conformity of the will of man to the will of God, in which the true dignity and happiness of human nature entirely consist. The more steadily and habitually we fix our attention on this important point, that all things are under the best direction, and invariably cooperating in the best manner to accomplish the best end, the more shall we be disposed to acquiesce and to rejoice in all that happens, and to submit our own limited views, and erroneous desires, to the decrees of Divine Providence. And in the end, the will of the pious and upright mind will be so completely absorbed in that of God, as to desire nothing to happen different from what actually comes to pass, and to aspire
after

after no other honour or felicity than that of being a humble coadjutor with God, in the accomplishment of his magnificent design of universal order, virtue and happiness*.

* General references upon the subject of liberty and necessity are :

Hobbes on Necessity.

Controversy between Clarke and Leibnitz.

Collins on Necessity.

Edwards on the Will.

Hume's Essays, vol. ii. numb. 8.

Hartley on Man, part i. Conclusion.

Priestley's Illustrations of the Doctrine of Necessity.

Correspondence between Dr. Price and Dr. Priestley.

Palmer's Remarks on Priestley, and Priestley's Reply.

Reid on the Active Powers, essay iv.

Dr. Gregory's Essay on the Difference between the Relation of Motive and Action, and that of Cause and Effect.

Crombie, Essay on Philosophical Necessity.

Godwin's Enquiry concerning Polit. Justice, book iv. ch. 7—9.

CHAPTER X.

CONCERNING POWER.

POWER IS THAT QUALITY OR ATTRIBUTE OF ANY BEING WHICH PRODUCES CHANGE IN THE NATURE, PROPERTIES, OR CIRCUMSTANCES OF THINGS. Thus we say, that clay becomes hard, and wax soft, by the power of heat. A bee is said to have power to build a cell, a bird to make a nest, a man to construct a house or a ship, and the like.

FIRST, POWER is ascribed to INANIMATE SUBSTANCES.

1. It is observed that certain CONSEQUENTS regularly follow certain ANTECEDENTS. Wax applied to the fire dissolves; a needle offered to a magnet moves towards it; a stone projected falls to the ground; a feather held near an excited electric is first attracted and then repelled, and the like.

2. These antecedents are called CAUSES, and the consequents EFFECTS: the unknown energy by which the change is produced is called

called **POWER**, and is commonly supposed to reside in the cause, that is, in the immediate antecedent. Thus, a magnet is said to have power to attract iron; water has power to dissolve salt; a mirror has power to reflect rays of light, and the like.

3. All that we know of the subject is, that certain changes uniformly succeed to certain previous circumstances; from which we infer, that there is **SOME SUFFICIENT REASON FOR THIS CONSTANT CONJUNCTION**. But what the nature of this connexion is, what the power by which the change is effected, or where that power resides, are subjects of which we are totally ignorant, and concerning which we have no means of information.

4. As it is a received principle amongst philosophers, that no being can act where it does not exist, from whence it is inferred that matter cannot act beyond its surface; and as it is known that ultimate atoms, if any such there be, are separated from each other by spheres of repulsion within the spheres of the attraction of cohesion, it is concluded that all the active powers which are vulgarly believed to reside in matter, are in truth energies of the Divine Being, exerted uniformly in different

different circumstances, agreeably to certain laws, which for the benefit of his creatures he has been pleased to prescribe to himself*.

Locke, and others, are mistaken in representing the idea of power as an idea of sensation, acquired by observing the changes which take place in objects around us, whether agents or patients. Power is not an object of sense. All that our senses teach us is, that certain phenomena are invariably conjoined with certain previous circumstances; but of the mode of connection, or of the energy by which the change is produced, we are left in total ignorance†.

6. Powers are either attributes of inanimate substances, or divine energies exerted according to certain prescribed laws. If they are attributes of inanimate substances, the effects produced by them in given circumstances are necessary effects, and could not have happened otherwise, the previous circumstances being the same. In this sense, every such cause is a *necessary cause*. But if all powers are divine energies, the effects pro-

* Price and Priestley, page 5. 230.

Price's Dissertations, page 39, &c.

† Locke's Essay, book ii, ch. xxi. sect. 1, 2.

duced by them are no further necessary than as it is the will of God that such effects should take place, under certain circumstances. And the immutability of the course of nature in this case depends; not upon the necessary operation of the powers of nature, but upon the immutability of the divine character.

7. The word power, when applied to inanimate substances, like the words principle, electricity, magnetism, gravitation, &c. is a term invented to express the unknown cause of known effects which are reducible to certain general laws.

8. Constant conjunction is a proof of *necessary connexion* between antecedents and consequents, if powers are attributes of inanimate substances. But if all powers are divine energies, the constant conjunction of antecedents and consequents proves nothing more than the immutability of the divine purpose : there being no other assignable reason for the undeviating uniformity of the course of nature. But as God is perfectly wise and benevolent, the effect is equally certain as if it was mechanical and involuntary, in all cases where there is a ground of preference. The necessity in these instances is not physical but

moral. And with this restriction it may be allowed as a general principle, that constant conjunction implies necessary connexion.

9. It is difficult to ascertain whether powers are, properly speaking, attributes of inanimate substances. To allow that they are, seems to imply that power may exist without an agent, and that beings may act where they do not exist. This absurdity follows, if, for example, gravitation is supposed to be a power inherent in matter, by which bodies act upon each other at immense distances. But, on the contrary, to deny that powers may be attributes of inanimate substances, leads to the conclusion that nothing exists in the universe but God and his energies; which coincides with pantheism, and even tends to atheism.

SECONDLY, POWER may be considered as an ATTRIBUTE OF MIND.

POWER, in this view of it, may be defined, the CAPACITY OF CARRYING INTO EFFECT THE DETERMINATIONS OF THE WILL.

The philosophers who maintain that power is an attribute of the human mind, argue,

1. From consciousness and observation. I will to walk, to speak, to write; the feet, the

lips, and the fingers instantly obey; and I am as conscious that I perform the action, as that I form the volition.

Other agents also appear to possess a similar power of carrying their volitions into effect.

2. They affirm that we have a **CÓNCEPTION** of power, though we cannot define it. The frequent and proper use of the word in the English language, and of corresponding words in all languages, proves that all men have a conception of power, and therefore possess the attribute*.

The philosophers who deny that power is an attribute of the human mind, contend on the contrary,

1. That we have no consciousness of its existence.

All that we are conscious of is, volition and the effect produced. That we are conscious of exerting power in any case, is peremptorily denied. What some call a consciousness of power, is nothing more than a belief that the effect will follow the volition; which belief is sometimes erroneous. A man who is deprived of the faculty of speech, or the use of his limbs, by a stroke of the palsy, still

* Reid on Active Powers, essay i.

feels what is called a consciousness of power : that is, he expects speech and motion to follow volition as usual, till by experience he is undeceived.

2. These philosophers further argue, that our total ignorance of the manner in which muscular motion is produced, proves that the mind is not the efficient and proper cause of this wonderful effect.

Every proper cause comprehends its own effect. A man who makes a watch, or who builds a house, forms a distinct idea of the effect he intends to produce, and of the means necessary for accomplishing his purpose. A musician who understands his art, and who by his skill in touching an instrument brings forth the tones, and produces the harmony which his mind previously conceives, is so far the proper cause of the effect produced. But the man who, turning the winch of a machine, the construction of which he does not comprehend, produces a melody which he neither understands nor expects, is no more the proper cause of the effect produced than the unconscious instrument itself. And similar to this is the situation of the mind in the production of muscular motion.

Of the nature of muscular motion we are completely ignorant. The immediate effect is very different from that intended by the agent. The design is to move a limb: but the effect actually produced is some affection of the brain, of which we are quite ignorant; which, being gradually communicated to the adjacent parts, at length descends to the muscle in question, and, by a forcible contraction of the fibres, in a way of which we are also profoundly ignorant, it moves the limb. But what the medium of nervous influence may be, in what manner the muscular fibres are excited to action with such astonishing force; and by what chance, or sagacity, the proper nerves and muscles are affected, so that we seldom or never commit the mistake of moving one limb when we design to move another, are mysteries to the solution of which the human intellect is unequal.

Hence it follows:

1. That power is not an attribute of the human mind; and as a divine energy is necessary to account for the existence of sensations in consequence of sensory vibrations, so it seems equally necessary, to account for the connexion between volition and muscular

cular motion. Thus God appears to be the primary cause of all the phenomena of mind as well as of those of matter, and the only proper agent in the universe.

2. We have no adequate idea, or conception, of power. It is not an object of sense, nor can it be acquired by reflection. The use of the word to express the unknown cause of known effects, no more proves that we have a distinct positive conception of the thing, than the use of the words gravitation, cohesion, repulsion, and the like, proves that we have distinct ideas corresponding to those terms.

3. If the question be asked, Whether we may not possess power, as we do perception, though we do not comprehend it? it may be replied, That though we do not understand the nature of perception, we are conscious of its existence; but we are not conscious of the existence of power.

4. According to Dr. Hartley's theory, muscular action is excited by the vibrations of the motory nerves. These vibrations are originally excited by irritation; and, being communicated to the brain, they become associated with and modified by sensory vibrations,

tions, and by degrees with that state of the brain which generates, or is uniformly associated with, the affection of desire. In this case the motion is said to be perfectly voluntary. It afterwards becomes associated with sensory vibrations, or clusters of vibrations, or miniatures of less magnitude, or even with other motory vibrations, so that one muscular motion will generate another without any perception of the mind or act of the will, as in speaking, walking, or performing upon an instrument of music.

It is obvious to observe, that how ingenious and plausible soever this theory may be, it by no means accounts, nor was it intended to account, for the nature of power, nor does it explain the manner in which the nervous particles are made to vibrate, or in what way the vibrations of the nerve affect the muscular fibres*.

5. Dr. Reid's theory of power reduces itself to a conclusion similar to that which has been already stated, though he begins with a pompous proof of the existence of power in the human mind. He even nearly coincides

* Hartley on Man, ch. i. sect. 3. ch. ii. sect. 7.

with

with Mr. Hume, whose hypothesis he professes to ridicule and explode. His words, page 57, are : " We perceive one event to follow another according to established laws of nature ; and we are accustomed to call the first the cause, and the last the effect, without knowing what is the bond that unites them." And again, page 56 : " How far we are properly efficient causes, how far occasional causes, I cannot pretend to determine*."

* Locke's Essay, book ii. ch. xxi.

Hume's Essays, vol. ii. sect. vii.

Search's (Tucker's) Light of Nature Pursued, vol. i. part i. ch. iv.

CHAPTER XI.

CONCERNING IMMATERIALITY AND MATERIALISM.

SECTION I.

*The Question stated.—Arguments for each
Hypothesis.*

THE IMMATERIALISTS contend that man is compounded of two distinct substances: BODY, which according to them is extended, solid, inert substance; and MIND, which is percipient, active, and indivisible substance.

Of immaterialists, some, as Dr. Clarke and Dr. Price, maintain that mind has one property, viz. extension, in common with matter, and consequently that it occupies space, and has a proper locality, or, as the schoolmen express it, ubiety. This is also the vulgar opinion*.

* Correspondence of Price and Priestley, page 54, 55.

Others,

Others, with the Cartesians, Andrew Baxter, and Watts, more consistently and philosophically contend, that mind has no common property with matter, that it is inextended, does not occupy space, and has no proper locality*.

The MATERIALISTS, as they are commonly called, though with some impropriety of expression, maintain, that man consists of one uniform substance, the object of the senses; and that perception, with its modes, is the result; necessary or otherwise, of the organization of the brain.

They also think that the immaterialists are mistaken in their representations of the essential properties of matter.

ARGUMENTS FOR IMMATERIALISM.

I. Perception and its modes, viz. memory, intellect, affection, volition, and the like, have no resemblance to, nor correspondence nor affinity with, any of the known properties of matter, such as extension, resistance, solidity, and the like, so that it is unreasonable to conclude that they are the result

* Correspondence of Price and Priestley, page 370, 371.

332 MATERIALISM AND IMMATERIALISM.

of these properties, however modified: attributes so different must inhere in different subjects. To this argument the materialists reply,

1. That ignorance of the connexion between different properties of the same subject is no objection against their coexistence, or even their mutual dependance. We see no connexion between the colour and the odour of a rose, the malleability, fixity, and specific gravity of gold, and the like. Our knowledge of the coexistence of various properties and powers in the same substance, is acquired only by observation and experience: we know nothing of real essences.

2: The argument proves too much. Mechanical, electrical, and magnetic attractions and repulsions, chemical principles, and vegetable life, have no more resemblance to the obvious properties of matter than perception. Do they also require an immaterial subject?

II. The essential properties of matter, namely, solidity, extension, inertia, and its acknowledged impercipiency except in an organized state, are said to be absolutely inconsistent with the material hypothesis.

The materialists, in reply, contend that these

these properties either do not belong to matter, or that they are not inconsistent with perception. Their arguments will be produced under the next head.

ARGUMENTS FOR MATERIALISM.

That perception, with its modes, is the result of the organical structure of the brain, has been argued from the following considerations :

When there is no organization, as far as our observation extends, there is no perception.

Wherever such an organic structure as the brain exists, perception exists.

Where this organization is imperfect, perception is imperfect.

Where the organization is sound, vigorous, and healthy, perception is proportionably vigorous and clear.

Where the organization is impaired, perception is enfeebled and obscured.

And when the organization ceases, perception appears to cease.

It is generally admitted by those who have thought upon the subject, that certain states of the brain exactly correspond with certain states of mind, and every change in the state of the brain is associated with a corresponding

change in the state of the mind. Disorders in the brain are accompanied with proportionable disorders in the intellect, as in drowsiness, intemperance, fever, delirium, and lunacy. If the brain remains unimpaired, intellect continues even upon the verge of dissolution, as in consumptions, dropsies, and other diseases which do not immediately affect the head*. It is therefore as reasonable to conclude that perception is the result of organization, as that pointing the hour is the result of the mechanism of a watch, or that the colour and odour of the violet is the consequence of its peculiar structure: and we have as good reason to believe that thought is an affection or attribute of the brain, as that fragrance is a property of a rose, or that light and heat proceed from the sun.

SECTION II.

Objections against the Hypothesis of Materialism, stated and solved.

BY the adversaries of the hypothesis of materialism it is urged, in a lofty and triumphant tone, that the known essential proper-

* Hence some have inferred, though unphilosophically, the immateriality and separate existence of the soul.

ties of matter are ABSOLUTELY INCONSISTENT with perception and activity, the essential attributes of mind.

These properties are SOLIDITY, EXTENSION and DIVISIBILITY, INERTIA, and the acknowledged IMPERCIPIENCY of ultimate atoms, or of matter in general, in an unorganized state.

I. SOLIDITY, by which is meant the cause of impenetrability*, is said to be inconsistent with the power of thinking. To this assertion the materialists reply,

1. That admitting solidity to be an attribute of matter, it cannot be proved to be inconsistent with perception. No evidence is produced for this purpose but gratuitous assertion, which cannot be admitted in opposition to facts, nor to probable appearances.

2. There is no reason to ascribe solidity to matter as a distinct property.

The solidity of matter is inferred only from its resistance. Now all the phenomena

* Mr. Locke calls solidity an idea of sensation; Dr. Price classes it amongst those ideas which are derived from the understanding only. The truth is, that the word is unconnected with any positive idea. It expresses no more than the unknown cause of *resistance*.—Locke on the Understanding, book ii. ch. iv. Price's Review of Morals, page 26—28.

of resistance may be accounted for by that repulsive power, the existence of which, in a degree far beyond that of any artificial force which can be applied to overcome it, is universally admitted. It is contrary, therefore, to the received rules of philosophising, to introduce a new and imaginary cause, to explain phenomena which may be sufficiently accounted for by another cause already known to exist*.

But if matter be not solid it is not impenetrable: the strongest repulsive force actually existing may be overcome by a superior power; and the hypothesis of the penetrability of matter may, perhaps, afford the best

* The following phenomena, amongst others, are adduced as proofs of the existence of a repulsive force diffused over the surfaces of bodies without the sphere of cohesion.

1. The rolling of a dew-drop upon a cabbage-leaf, and the motion of a fly upon the surface of a pool.

2. The equable reflexion of light from the surface of a mirror.

3. The visibility of the electric spark in passing from link to link of a metal chain.

4. The extreme difficulty of bringing two bodies within the sphere of each other's cohesion.

5. The compression of all bodies by cold, their expansion by heat, and the irresistible force of this expansive power.—Priestley on Matter and Spirit, sect. ii.

solution

solution of the phenomena of transparent bodies.

If matter be penetrable, it approximates very nearly to Dr. Clarke's and to the vulgar hypothesis of immaterial substance; and the advocates for this doctrine can have no just objection against the hypothesis which maintains man to be of one uniform substance, and thought the result of organization. It is to be presumed that these philosophers will not assert that immaterial substance, as such, is necessarily percipient*.

II. Matter is a **DIVISIBLE SUBSTANCE**; perception is an **INDIVISIBLE PRINCIPLE**; therefore it cannot be a property of matter. To this objection it is replied,

I. That of the nature of perception we are totally ignorant. The mind can no more comprehend † this faculty than the eye can see itself. And it would be as rational for a man ignorant of the structure of the eye to maintain that the eye was an indivisible or-

* Price and Priestley, page 268—273.

† Non valet tantum animus ut seipsum ipse videat; at, ut oculus sic animus se non videns, alia cernit.—Cic. Tusc. Quæst. lib. i. sect. xxviii.

gan, as that perception is an indivisible principle.

2. The simplicity of the *faculty* cannot be inferred from the simplicity of the *feeling* of perception. A white colour, the flavour of a compound medicine, an abstract idea, and the like, are judged to be simple feelings, but they are in fact produced by the coalescence of many simple sensations and ideas.

3. The principles of heat, of acidity, of vegetation, of animal life, and many others, are allowed to belong to matter; but these principles have as great pretensions to indivisibility as perception.

4. An indivisible principle may as well exist in a divisible substance, as a divisible idea, such for example as the idea of a yard, or a mile, in an indivisible substance*.

5. Many immaterialists admit the extension and locality of spirit; the difficulty therefore presses equally upon this hypothesis as upon materialism.

To evade this conclusion by maintaining that spirits, though extended, are indiscernible, is trifling, it is not reasoning. The

* Hallet on Scripture, vol. i. page 216—219.

simple question is, Whether an inextended principle can be a property of an extended substance?

III. Matter is **ESSENTIALLY INERT**, mind **ESSENTIALLY ACTIVE**; therefore the substances are essentially different.

But this fact is denied by the materialists. Inertia, if by this expression be meant the entire absence of all active power, is not a property of matter. The laws of communication of motion do not prove it. Andrew Baxter's laboured argument, so far as it is self-consistent, amounts to no more than that every effect must have an adequate cause. All we know of matter is active powers; and all improvements in philosophy, and particularly in chemistry, tend to confirm this doctrine, and to extend our knowledge of the energies of inanimate nature*.

IV. It is not pretended that **ULTIMATE ATOMS**, that is, that the smallest particles into which matter is ever actually divided,

* Baxter on the Soul, vol. i.

Franklin's Works, page 479.

Priestley on Matter and Spirit, page 17.

Price and Priestley, page 236.

are possessed of PERCIPIENCY ; it is therefore incredible that any combination, organization, motion, or collision of insensible atoms, should produce thought. The properties of the whole are no more than the aggregate of the properties of the parts ; and magnitude and motion, however combined, can produce nothing but magnitude and motion still.

To this very plausible objection some have replied,

1. By maintaining that all atoms possess an imperfect consciousness, which is improved by organization : but this is an unsupported hypothesis*.

2. Others have asserted that all atoms may possess the same original powers, which in some circumstances may be dormant, in others they may become sensible. In chemical compounds it often happens that the result of the process is a tertium quid, the properties of which are essentially different from those of the component substances, and could never have been predicted from them. In like manner, the latent powers of perception which

* Hobbes's *Physic.* c. xxv. sect. v.

each particle possesses may by organization be brought into action*.

3. The difficulty presses equally upon the hypothesis of immaterialism.

The supposed immaterial substance either perceives and acts in a state of separation from the body, or not.

To say that it can perceive and act in a state of separation from the body, is a gratuitous hypothesis, contradicted by all the phenomena of human nature, and unsupported by a single fact.

But if separate consciousness be denied to the immaterial part of man, it is as inconceivable how a thinking being can be formed by the union of unconscious immaterial substance with unconscious matter, or of an unthinking soul with an unthinking body,

* Qu. Do not appearances rather favour the supposition of different kinds of elementary atoms, some only of which possess the percipient principle?

It is well known that many seeds will preserve for years their vegetative power; but this principle does not discover itself except in certain favourable circumstances.—Clarke and Collins, page 116. Cooper's Tracts, page 275—285.

as by the organization of impercipient particles.

GENERAL REMARKS.

1. This controversy was once considered as of great importance, the immateriality of the soul being regarded as a proof of its natural immortality ; for it was presumed that what is immaterial must necessarily be incorruptible.

But, admitting the premises, the conclusion will not follow. What proof is there that immaterial substances are necessarily indissoluble and immortal ? We may make what suppositions we please ; but our imaginations are no criteria of real existences. Continuance in being depends upon the will of God, who may either perpetuate a material, or extinguish an immaterial substance. Of his will in this instance we can only judge from natural appearances, or immediate revelation.

2. How far materialism is consistent with identity, has been already considered. Though the whole man is destroyed by death, yet the re-organization of the same particles will reproduce the same individual being ; and a similar re-organization even of different particles

ticles would be to all practical purposes a reproduction of the same person. For, of what consequence is it to what mass of atoms a particular organization is applied, and the corresponding system of feelings annexed? At any rate Dr. Watts's hypothesis of permanent stamina would preserve the individuality of the resurrection-man as perfectly as the hypothesis of immaterialism itself.

3. The denial of solidity and inertia reduces matter, very nearly, to the commonly received notion of spirit*; so that Dr. Priestley's hypothesis may with as much propriety be called spiritualism as materialism. The true question is, Does man consist of one uniform substance, or is he compounded of

* Dr. Price says, page 85: "Upon the whole, it may, perhaps, be possible to convince me that there is no such thing as matter; and Dr. Priestley has contributed a little to it. But I cannot be convinced that there is no such thing as spirit; meaning by spirit, such a thinking intelligent nature as I feel myself to be." Upon which Dr. Priestley justly observes, page 86, that Dr. Price and he "are very nearly agreed, though in words they differ so widely." Dr. Priestley's matter being penetrable extension without solidity, nearly coincides with Dr. Price's spirit, or immaterial substance.

two distinct substances, which, for aught that appears, have no common property* ?

* Clarke's Letters to Dodwell, and Controversy with Collins.

Doddridge's Lectures, lect. 94—96.

Priestley's Disquisitions, and Correspondence with Price.

Cooper's Tracts, page 167, &c.

W. Belsham's Essays, vol. i. ch. ii. essay xii. xiii.

Baxter on the Soul, part i.

CHAPTER XII.

CONCERNING THE NATURAL EVIDENCE OF A FUTURE LIFE.

SECTION I.

Inconclusive Arguments.

FIRST. The soul is immaterial, distinct from the body, and naturally indiscerptible, incorruptible, and immortal.

ANSWER.

1. The existence of an immaterial soul distinct from the body in which it resides, and which it is supposed to animate, cannot be proved, and must not be assumed as the foundation of so important an argument. The evidence for and against this hypothesis has been discussed in the preceding chapter.

2. That a human soul, if such a being should be supposed to exist, is capable of perception and activity in a state of separation from the body, is an arbitrary hypothesis,

thesis, unsupported by a single fact, and contrary to every known phenomenon of human nature. It is indeed so unphilosophical, that the supposition is abandoned by the most rational and judicious advocates of the immaterial system.

3. That immateriality necessarily implies indiscernibility, incorruptibility, and natural immortality, is an assertion perfectly gratuitous; a mere argumentum ad ignorantiam. For any thing that appears or can possibly be proved to the contrary, immaterial substance may be as liable, or even more liable to injury and dissolution than matter itself. We may fancy what we please, but vague hypotheses are not to be admitted as serious argument. The truth is, that of the nature and contexture of immaterial substance we know absolutely nothing, and can therefore have no right either to affirm or deny any thing concerning it.

4. If the existence of an immaterial principle in man could be established by proof, no argument could be drawn from this fact in favour of a future life. Continued, or revived existence depends wholly upon the pleasure of God, who can with equal ease extinguish an immaterial

immaterial, and preserve or renew the existence and powers of a material, being.

SECONDLY. The natural desire of life, and horror at the thought of annihilation, is intended by the author of the human constitution as an intimation that man is designed for immortality.

ANSWER.

1. The desire of life, though very general, is not an instinctive principle, but generated by the preponderance of pleasing affociations, which lay a foundation for pleasing hopes; together with a strong apprehension, whether well or ill founded, of the pains of dissolution. When pain preponderates over pleasure, life ceases to be pleasing, and existence ceases to be desirable. As to what some have pretended, that existence in pain is preferable to non-existence, it is mere rant, and has no foundation either in reason or experience.

2. The love of life, however generated, and independent on all connexion with future existence, is a principle of great importance, and particularly, as a preventative of suicide upon trivial occasions.

3. The

3. The desire of life, however universal and predominant, no more proves that man will be immortal, than the desire of health, ease, or opulence, proves that he will be rich, or free from disease and pain.

THIRDLY. Conscience is a natural and instinctive principle, implanted in the breast to direct the moral conduct of men, and the sanctions of her dictates are the rewards and punishments of a future life; of the existence of which, it forms a strong presumption.

ANSWER.

Conscience is not instinctive. It is the acquired habit of referring our actions to an established rule, and of applauding or condemning them as they agree or disagree with the standard assumed. Conscience depends wholly upon education, both as to the standard and the sanction. The well informed person guides his moral conduct by a correct rule, and is influenced to the practice of virtue by various considerations relative both to the present, and the future life. But a man whose moral education has been defective
and

and erroneous, forms a false judgment of the rule of right, and is often influenced by public opinion, or some other motive foreign to the expectation of a future existence.

FOURTHLY. The capacity which the human mind naturally possesses for progressive and endless improvement, is a farther presumption that it is intended for endless existence.

ANSWER.

This argument, though often and triumphantly insisted upon as absolutely unanswerable, is contrary to palpable facts. So far are the faculties of the mind from improving with age, that it is notorious that as men advance in life, and as the vigour of the body declines, the senses become more obtuse, the apprehension more dull, the imagination less fervid, the memory less tenacious, and the judgment less correct; prejudices become more fixed and unalterable, new ideas are acquired with greater difficulty, and the stock of knowledge is daily diminishing. Exceptions to these facts are very uncommon. And the just conclusion from these premises seems to be, that the intellectual

tellectual principle declines and decays with the body, and ultimately dies with it, without any hope of renovation but what arises from the Christian doctrine of a resurrection of the dead.

FIFTHLY. The justice of God requires that there should be a future state of existence in which the characters of moral agents shall be publicly discriminated, and all shall be openly rewarded or punished, in exact proportion to the real merit or demerit of their respective characters.

ANSWER.

1. The justice of God requires that he should do no injury to his creatures, that he should invade no right, and deprive them of no blessing to which they have a just claim, and that misery should not preponderate over happiness through the whole extent of individual existence, so that being should upon the whole be a curse to any of his creatures. Beyond this, no percipient being can have any claim upon the justice of his maker.

2. It cannot be proved to be an act of injustice, that a being should be brought into existence to answer some important and beneficial

neficial purpose under the divine government, and that after passing through a variety of scenes diversified with pleasure and pain, but in which happiness predominates upon the whole, when the end for which he was created is accomplished, he should cease to exist.

3. Virtue is the conduct which leads to the greatest ultimate happiness; vice, that which leads to misery. And in the present state the preponderance of happiness is, generally speaking, very considerably on the side of virtue; a happiness arising from the consciousness of moral worth, from peace of mind, from general esteem, from pleasing reflections, and joyful expectations. And the tendency of virtue to happiness is far greater than a superficial observer would imagine. Also, the tendencies of vice to produce misery are very strong; and that disordered state of mind which either constitutes vice or is produced by it, is a state of uneasiness, and often, even of torment, which no external prosperity can alleviate, or compensate. So that, generally speaking, every purpose of substantial justice is answered independent of a future state.

4. Though

4. Though the exact correspondence of the final state of moral agents with their real character under the government of God, approves itself to the understanding as a beautiful and desirable arrangement; yet, independent of revelation, it would not be easy to prove, that such an arrangement was either necessary, or expedient. Nor can it be proved to be impossible that the ends of the divine government may be best answered, by treating all in such a manner that none may have reason to complain, and that some might have a greater share of happiness than could reasonably have been expected to have fallen to their lot.

5. Much less can it be proved, that justice requires that the exact adjustment of good and evil, to the moral characters of men, should be made apparent to every individual. This indeed would be scarcely practicable, unless every creature were omniscient. And what obligation can the Supreme Being be under to give an account of his government to all his creatures? It is amply sufficient if every percipient and intelligent being has reason to be satisfied that he is himself not treated with injustice. If it be urged that the public triumph

triumph of virtue, in the ultimate equal distribution of punishments and rewards, would be a powerful encouragement to the practice of it; it may be answered, that if the practice of virtue be sufficiently enforced by the discipline to which moral agents are subjected in the present life, what necessity is there for further sanctions or more powerful motives?

6. It must however be admitted, that the moral state of the world is upon the whole favourable to the expectation of a future life, as will hereafter be explained.

SIXTHLY. It has been argued, that it is more probable that we shall live hereafter, than it was a hundred years ago that we should live at all*.

ANSWER.

Though the causes which necessarily led to the production of the being which now actually exists, were themselves in existence a hundred years ago, yet their operation being unknown they could excite no expectation. And by parity of reason, whatever certainty there may be of a future existence; yet, if we are ignorant of the grounds of that certainty,

* Paine's Age of Reason.

they can excite no rational expectation of a life to come.

FINALLY, Few persons will be disposed to maintain, that on the hypothesis of atheism the appearances of things lay any just foundation for the expectation of a future state of existence. Nor can the arguments for the soul's immortality in the Phædo of Plato, that contraries produce each other, and that all knowledge is merely the reminiscence of a pre-existent state, be now thought to prove any thing more, than the deplorable ignorance and perplexity of the strongest minds when destitute of the light of divine revelation.

SECTION II.

Probable Arguments for a future Life. General Remarks.

ASSURED as we are by divine revelation of the future existence of man, it is no less certain that the present state of things must be so constituted, as to have a bearing towards it, and an intimate inseparable connexion with it: so that, to a being who could comprehend

prehend the whole of the divine plan, the restoration of the human race to life and immortality would appear to be an indispensable part of the general system, and all the phenomena of the natural and moral world would be seen to point towards it, and to harmonize with it. It is also reasonable to expect that some of those phenomena, which have an aspect towards a future life, and which admit of the most satisfactory solution upon that hypothesis, would occur to the notice of an upright and inquisitive mind; and that such phenomena would appear more numerous, and that the evidence would rise, in proportion to the improvements that are made in physical and moral science. But whether this evidence would ever become so clear and distinct, as to countervail the objections arising from the contrary phenomena, to preclude all anxious suspicions, and to afford complete satisfaction to a serious and candid inquirer, will admit of very considerable doubt.

The principal phenomena which countenance the doctrine of a future life, by admitting of the best, and perhaps the only

solution upon that hypothesis, are the following.

1. The capacity which, so far as appears, is peculiar to man, of forming expectations of a state of existence after death, of being strongly impressed by these expectations, of desiring or fearing a future life, and of regulating his conduct by an habitual regard to it. Why is man allowed this painful pre-eminence, if, like the brute, he is only the creature of an hour?

2. The moral constitution of human nature is best explained upon the supposition of a future life. Men are placed in circumstances which necessarily generate the benevolent affections, and that in a degree which often induces them to make the greatest sacrifices to the good of others, without a prospect or even a possibility of adequate recompense if there be no future life. This constitution of things is indeed productive of great benefit to the system, even if there should be no state of existence after the present; but every difficulty vanishes if a future life be admitted, in which all generous sacrifices to the public good will be suitably and amply recompensed

recompensed to the individual himself. This is the only supposition which establishes moral obligation upon a firm and solid basis, which completely reconciles generosity and wisdom, benevolence and self-love, and which makes human nature consistent with itself.

3. The appearances of a moral government over the world; the tendencies of things to the encouragement and reward of virtue, and to the discountenance and punishment of vice; the existence of conscience, not indeed as an instinctive and infallible principle, but as a capacity in man to refer his actions to a moral rule, and to a future retribution, and of deriving exquisite pleasure or pain from the decisions of this interior tribunal. These facts considered in connexion with the many exceptions to the general rule; the instances in which vice is apparently triumphant, and virtue depressed and abandoned; the want of a public retribution exactly corresponding with men's moral character; the cases of martyrs and others who are sufferers in the cause of truth and virtue without a possibility of compensation, and the like, naturally tend to excite the ex-

pectation of a future life in the minds of serious inquirers who have formed just, however inadequate, conceptions of the moral character of God. And if these facts do not prove that the creatures of God have any demands upon his justice, they are at least of such a nature as to be with great difficulty accounted for, if the doctrine of a future life is denied: but to admit of a very easy solution, if the present be regarded as a state of probation preparatory to a future recompense;

4. The pains of death, which, though probably not equal to the apprehensions generally entertained concerning them, are nevertheless in many instances very acute and severe, are most easily accounted for upon the supposition of a future life. If existence must terminate with life, why should it terminate in pain? All other evils, as far as we can judge, have their proper use; they are cautionary or remedial; they subside into pleasure, or they are introductory to it: at least they are intended to prevent greater evils. Why should the pains of dying, the most formidable of all, be an exception to the general rule? Admit the doctrine of a future existence, and the pains

pains of death may have their proper use equally with those of life; and under the divine government the wise and benevolent law may prevail universally, that no evil shall exist which is not productive of preponderant good*.

5. The wonderful provision made for the discipline of the mind, and for training mankind to knowledge, virtue and happiness; the wisdom and benevolence of the design; the imperfect manner in which it is accomplished in the present state, considered in connexion with the knowledge and power of God, are appearances favourable to the expectation that this important process shall be resumed in some future state of existence, and that the glorious scheme shall be completed in the perfect virtue and felicity of every individual. That this is possible, few will dispute; and

* Dr. Hartley says, "It is hardly reconcileable to the beauty and harmony of the visible world, to the general pre-pollency of pleasure over pain, and subserviency of pain to pleasure, and it would be very dissonant to the other events of life, that death should be the last, that the scene should conclude with suffering." Hartley, vol. ii. p. 386, 8vo.

If any should object that this argument would prove the future existence of brutes, it may be replied, that with

and that such should be the happy result of the divine plan, is consonant with the best conceptions we can form of infinite wisdom and goodness.

This argument does not necessarily assume the existence of an immaterial soul, naturally capable of progressive and perpetual improvement, or even of perception and action independent on the body. But in reply to this pleasing speculation it may perhaps reasonably be asked, Whether we have sufficient proof of the perpetual improveableness of the individual? and whether appearances will warrant any further expectation, than that of the gradual improvement, and ultimate perfection of the species?

6. The general expectation of a future existence which has prevailed in the world, is favourable to the truth of the doctrine. This belief was not the result of argument, for, phi-

their destiny we have no concern; and that man is capable of anticipating the pangs of dissolution with anxiety and terror, which the brute is not. It is the hope of a future life alone which can "deliver those, who would otherwise through the fear of death, be all their lifetime subject to bondage."

losophers

philosophers who reasoned most upon the subject were least inclined to admit the conclusion*; and the common people who speculated the least were the firmest believers in the doctrine. It also appears that the most rational expectations of a future life were those of the earliest ages†. Hence it seems probable that the prevalence of this expectation must have been the consequence of a revelation communicated to the first ancestors of mankind, and by

* Cicero, speaking of the hypotheses of the philosophers concerning the nature and future existence of the soul, says, *Harum sententiarum quæ vera sit Deus aliquis viderit, quæ verisimillima magna quæstio est.*—*Tusc. Quæst. l. i. sect. 11.*

One of the interlocutors, speaking of the argument of Plato, which he had often read, says, *Nescio quomodo dum lego assentior, cum posui librum et mecum ipse de immortalitate animorum cœpi cogitare, assensio omnis illa illabatur.*—*Ibid.*

Catervæ veniunt contradicentium non solum Epicureorum, sed nescio quomodo doctissimus quisque contemnit, i. e. immortalitatem.—*Ibid. sect. 31.*

† Auctoribus quidem ad istam sententiam quam vis obtineri uti optimis possamus—et primum quidem omni-antiquitate, quæ quo propius aberat ab ortu et divina progenie, hoc melius fortasse quæ erant vera cernebat.—*Ibid. sect. 12.*

them

them transmitted to their posterity, who have preserved it by tradition from generation to generation, and have fondly cherished it as coinciding with the prevailing earnest desire of continued existence, and the almost universal dread of annihilation.

REMARKS.

1. This argument assumes as a principle, what is nevertheless contradictory to universal experience, that just conceptions of the attributes, character and government of God might have been attained without the assistance of revelation; whereas we certainly know that the most sagacious and enlightened of the heathen philosophers fell into the most deplorable errors upon this subject, or remained in a state of the most distressing ignorance and uncertainty*.

2. The whole of this argument would be opposed, and, in the estimation of a serious and inquisitive mind, would probably be overruled, by the palpable fact, that when the

* Cicero de Natura Deorum.

Leland on Necessity of Divine Revelation, part i.
man

man dies, his whole substance is dissolved and dissipated; and that there is on the one hand, no rational evidence of the permanent existence of a principle capable of perception and action in a state of separation from the body; nor, on the other, any fact or analogy to lead to the conclusion, that the being who is thus reduced to his original dust, might ever in some future period of duration be recalled to life. All analogies which have been produced in favour of a resurrection from the grave, such, for example, as the revival of vegetables in the spring, the growth of a plant from seed, the transformation of a caterpillar into a butterfly after having passed through the intermediate state of a chrysalis, and the like, are deficient in a most essential circumstance, namely, the extinction of life. In no case whatever has a revival taken place after the principle of life has become extinct, and the process of putrefaction has begun.

3. It appears in fact, that the heathen philosophers, who professed to believe in the doctrine of a future life, were so far from building their expectations upon a resurrection from the grave that, when this doctrine was
made

made known to them, they treated it with the most indecent levity and ridicule*. And the great mass of modern unbelievers, who see the fallacy of the immaterial hypothesis, and its irreconcilableness with the most obvious phenomena of human nature, resign the glorious expectation of a future life, and have no prospect before them but that of a dark unfathomable gulf, into which they must shortly be precipitated, without hope of ever emerging again to life, action, and enjoyment†.

4. The grand conclusion from all the preceding facts and reasonings is the INFINITE VALUE OF THE CHRISTIAN REVELATION, of the divine origin of which they constitute a strong presumptive argument.

The christian religion teaches with authority the doctrine of a future life; it places this doctrine upon its proper ground, a resurrection from the grave; it proves the truth of it by the miracles of those who were commissioned to publish it to the world; and it exhibits an example and a pledge of the final

* Celsus speaks of the doctrine of the resurrection as fitter for worms than men.—Origen. cont. Celsum, lib. v. page 240.

† Leland on Necessity of Revelation, part iii.

resurrection of all mankind in the person of Jesus of Nazareth, the great MESSENGER OF TRUTH, and the FOUNDER OF THE CHRISTIAN FAITH*.

* Clarke at Boyle's Lectures, page 269, 270.

Religion of Nature, page 208—211.

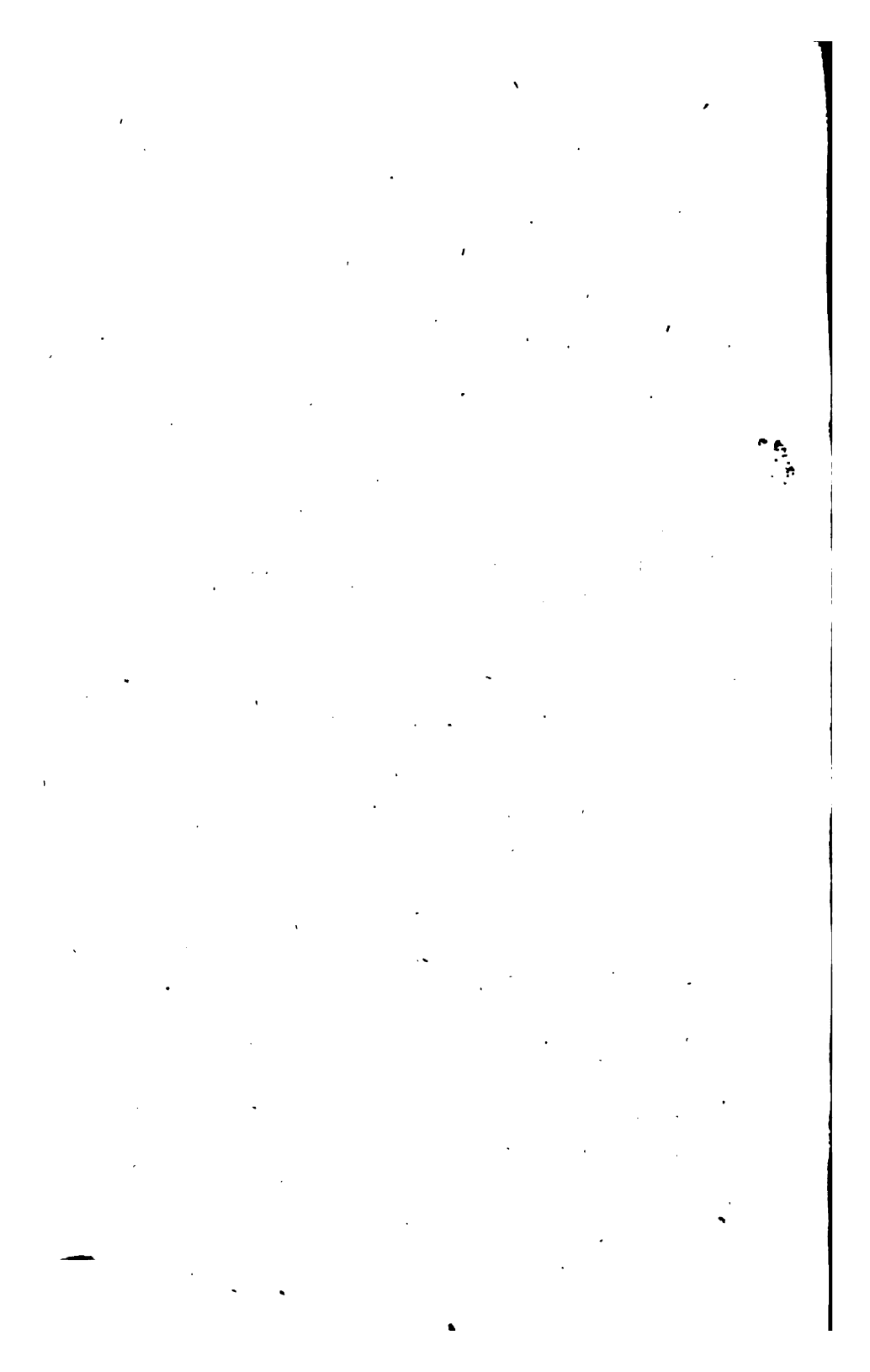
Howe's Vanity of Man, &c. Opp. vol. i. p. 640—650.

Hallet on Scripture, vol. i. page 236—289. vol. ii.
page 259—263.

Foster's Sermons, vol. ii. numb. 3.

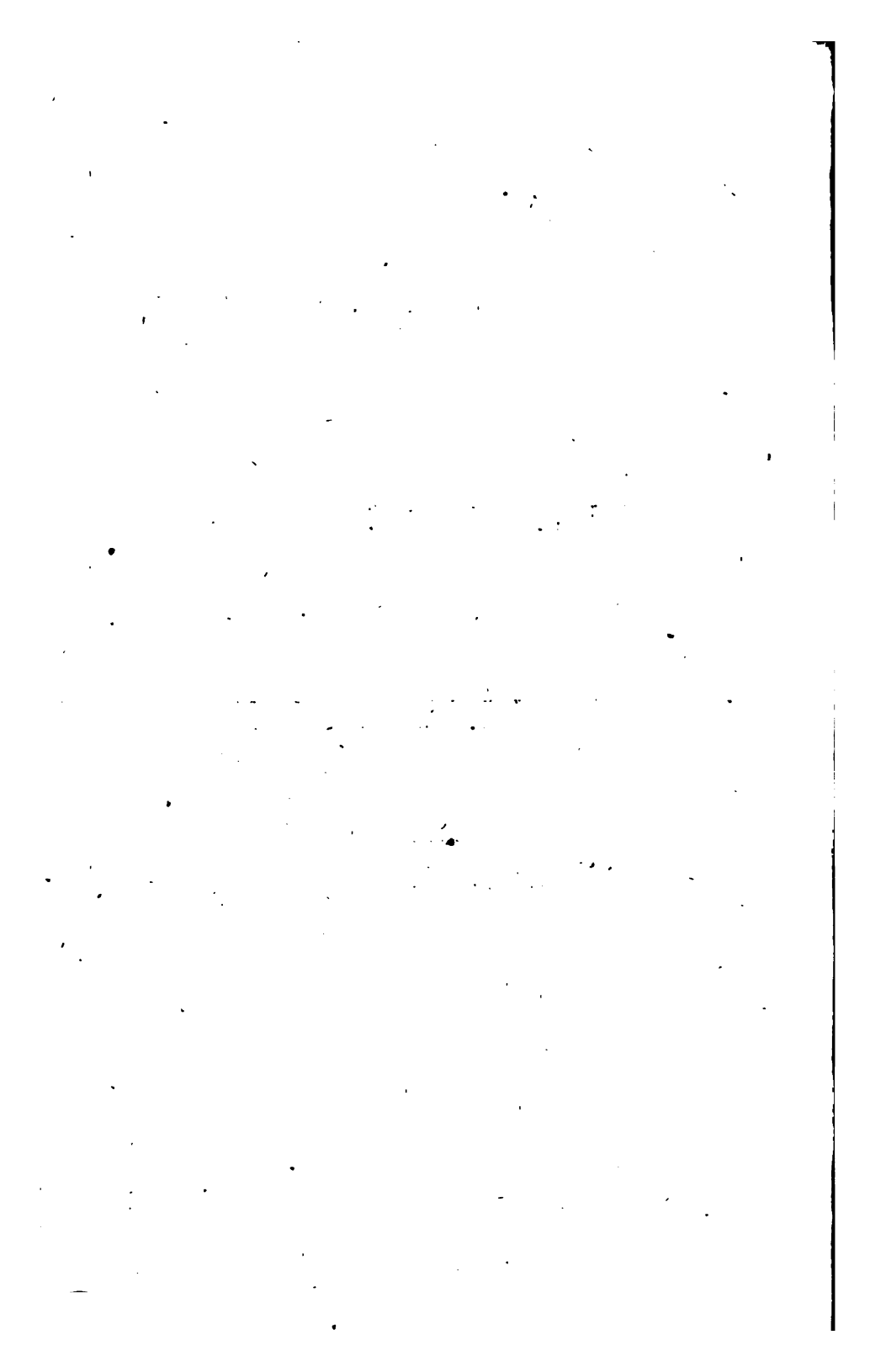
Hartley on Man, vol. ii. page 382—392.

THE END.



ELEMENTS
OF
MORAL PHILOSOPHY.

QUID UTILE, QUID NON.



ELEMENTS OF MORAL PHILOSOPHY.

SECTION I.

*Definitions of Virtue and Vice.—Distinction
between Natural and Moral Qualities.*

THE only valuable end of existence is HAPPINESS.

This is plain; for no person, if he had it in his option, would accept of existence but upon condition of a preponderance of happiness. Who, for example, would desire, or, if he could avoid it, would submit, to exist in a future state, if he had not reason to expect that it would be a state of preponderant felicity?

Also, when existence ceases to be happy, it soon ceases to be desirable.

Put the case, that existence in misery should be offered to any being, as a necessary means of good to others.

No one would accept of the proposal, who did not expect that the delightful consciousness of his generous feeling, would counterbalance the misery to which he exposed himself.

But this is contrary to the hypothesis, which assumes the supposition of unalleviated misery.

The case supposed is an extreme one ; but by the law of association preponderant misery ultimately resolves itself into an excess of clear, unalleviated misery. So that all suppositions ultimately terminate in pure misery or happiness, which therefore are the only cases which need to be considered. And whatever some may have imagined, or how incorrectly soever they may have expressed themselves upon the subject, no axiom can be more indubitable than this, that existence in pure unalleviated misery cannot be the object of rational choice.

VIRTUE, in propriety of language, is applied only to voluntary qualities, viz. action, affection,

affection, habit, and character, and expresses what is excellent and worthy of choice.

VICE, in propriety of language, is applicable to the same qualities, and expresses something which renders them ineligible, and worthy of being avoided.

ACTIONS are volitions carried into effect.

AFFECTIONS AND HABITS are tendencies to action, either natural or acquired.

CHARACTER is the sum total of affections and habits.

VIRTUE IS THE TENDENCY OF AN ACTION, AFFECTION, HABIT, OR CHARACTER, TO THE ULTIMATE HAPPINESS OF THE AGENT.

For, happiness being the only consideration which renders existence valuable, the tendency to it is the only quality which renders any disposition or action eligible.

VICE IS THE REVERSE OF VIRTUE; IT IS THE TENDENCY OF ACTION, AFFECTION, HABIT, OR CHARACTER, TO PRODUCE ULTIMATE MISERY, OR TO DIMINISH ULTIMATE HAPPINESS.

An action, or affection, accompanied with the most exquisite present gratification, may nevertheless be vicious, and that, even in a

high degree, as it may tend ultimately to diminish happiness or to produce misery.

Conversely, actions and affections, the performance or exercise of which may be accompanied with great present pain, may nevertheless be highly virtuous, as they may ultimately be productive of the greatest happiness.

Natural qualities, such as beauty, health, deformity, sickness, and the like, though productive of pleasure or pain, are neither virtuous nor vicious, because they are involuntary.

SECTION II.

Objections answered.

OBJECTION I.

ACCORDING to this definition of virtue, injustice, malice, treachery, and the like, would be virtues, if their tendency in any given instance was to produce the happiness of the agent; and justice, faithfulness, piety, and benevolence, would be vices, if they could be proved in any case to diminish the happiness of the agent. So that the moral value
of

of an action depends not upon its nature, but its tendency*.

ANSWER.

Agreed. If absurd principles are true, absurd conclusions will follow. Injustice, malignity, and the like, never can, in the present constitution of things, tend to happiness. It might with equal propriety be alleged, that if pain should ever become pleasure it would cease to be an evil.

OBJECTION II.

This definition of virtue will not apply to the moral rectitude of the Supreme Being.

ANSWER.

We necessarily conceive of God by analogy

* Dr. Price objects, (Review of Mor. p. 183), "Any
"the most pernicious and horrible effects will become
"just, and fit to be produced by any being, if but the
"minute degree of clear advantage or pleasure may
"result to him from them."

Cooper replies (Tracts, p. 103): "Granted. But let
"God look to that. A future state of retribution has
"been ascertained for the very purpose of obviating this
"objection: and it is sufficiently obviated." The ex-
"pression is harsh, and hardly consistent with the reve-
"rence due to the Supreme Being; but the meaning is
"just, and the reply satisfactory."

to the faculties and feelings of the human mind. It is happiness alone which gives value to existence, in an infinite as well as a finite being. Nor is it derogatory from the excellence of the Supreme Being, to maintain that his felicity is the result of the untroubled exercise of infinite benevolence; and that the rectitude of his character and conduct consists in its undeviating tendency to this most important end.

OBJECTION III.

This definition leaves it doubtful in some cases, whether an action be virtuous or vicious, as the ultimate tendency of an action cannot always be ascertained.

ANSWER.

The difficulty is real; but, it is no greater upon this, than upon any other definition of virtue*.

* For example, if it be required to ascertain whether truth is to be invariably observed. This is a practical difficulty, and remains precisely the same, whether virtue be defined as a tendency to individual happiness, or to the general good, or as the congruity of an action to the relations and character of the agent.

OBJECTION

OBJECTION IV.

This definition derogates from the dignity, of virtue, and represents it as a mere matter of calculation..

ANSWER.

The question is not concerning the dignity, but the essence of virtue; and this plainly consists in its tendency to happiness, the only valuable end of intellectual existence.

SECTION III.

Theory of the disinterested Affections.—Reconcilableness of Benevolence with Self-Interest:

OBJECTION V.

THIS definition is inconsistent with the disinterested love of virtue, and the practice of it for its own sake, which is nevertheless the highest state of moral excellence.

ANSWER.

For the solution of this difficulty it will be proper to pay a little attention to the history of those affections which are called disinterested.

Actions originally pleasurable, or indifferent, or even in a considerable degree painful, are performed at first from an interested motive; that is, with a view to gratification, or advantage.

Actions repeated a sufficient number of times generate affections, or tendencies to perform the action independent of the advantage to be derived from it.

The same causes continuing to operate, the affection will gradually attain such a degree of vigour, as to be of itself sufficient to produce the action, without any attention whatever to the interested motive.

The affection in this state is called disinterested; and the essence of a disinterested affection is, that its only object is its own gratification.

Hence it follows, that disinterestedness respects the *degree*, not the *tendency*, of the affection, and that it is equally applicable to affections of good or bad tendency, that is, either virtuous or vicious. Thus *avarice* as well as *benevolence* may be in a high degree disinterested, that is, when money is saved from a mere habit of saving, without any explicit view either to present or to future advantage.

AN

An affection, therefore, the tendency of which is to ultimate happiness, may at the same time be perfectly disinterested : and it is necessary to consummate virtue, that is, to perfect felicity, that it should be so. The objection therefore against the definition of virtue given above, as being inconsistent with the disinterested love of virtue, is of no weight, being founded in ignorance of, or inattention to, the true theory of human nature.

From the history of the disinterested affections it is also obvious, that virtuous actions are first performed from interested motives, and that by the repetition of these actions virtuous affections are generated, which gradually become disinterested.

Hence it follows, that it is an error to represent virtuous affections as innate, and likewise to assert that a disinterested love of virtue is the first approach to a virtuous character : it would be equally consistent with the true philosophy of the mind to maintain, that the first step towards avarice is a disinterested love of money.

OBJECTION VI.

This definition of virtue is inconsistent with
pure

pure benevolence, which requires the production of the greatest sum of happiness upon the whole, and the sacrifice of self-interest to the general good.

ANSWER.

1. It has been shown that happiness alone gives value to existence, and consequently that the true rule of life is to pursue happiness by the most efficacious means.

2. Experience proves that the practice of benevolence is, generally speaking, the most efficacious means of happiness; and that it is so in proportion to the strength, that is, to the disinterestedness, of the benevolent affection.

3. It is reasonable to believe that if *benevolence* were perfect, and *self* annihilated, happiness would be complete. Hence it follows that benevolence is the *rule*, and self-interest the *obligation*, of virtue*.

4. If

* Self-annihilation is essential to perfect virtue, and therefore to perfect happiness. If virtuous affections are not sufficiently powerful to produce their corresponding effects without the additional stimulus of self-interest, it is a proof that these affections are imperfect: for, in their highest or disinterested state, the impulse of the affection will always produce its corresponding act. So that the most

4. If the above statement be admitted, our definition of virtue ultimately coincides with that which places it in the voluntary production of the greatest sum of happiness, or in unlimited benevolence.

5. This conclusion is strongly confirmed, if it be admitted that the world is governed by infinite wisdom and benevolence, and that men are destined to a future state of existence. It is incredible that, under the government of God, any of his creatures should be ultimately losers by any sacrifices which they can make to the happiness of others.

6. Hence it follows that the doctrine of a future life gives consistency to the theory of

most refined self-interest, or that by which we practise virtue and piety with a view to ultimate reward, is inconsistent with the perfection of virtue and happiness. The idea of *self* is associated with so many ideas of anxiety and uneasiness, that, till this is excluded, there can be no pure unmixed felicity. Thus we see in the world, that the men who are most active and useful are most happy; while those who have no sufficient object to draw off their attention from self are most miserable. Such is the exquisite contrivance of nature, by which the selfish and social affections are reconciled and harmonized. — See Dr. Priestley's Sermon upon the Duty of not Living to Ourselves. Hartley's Observations, vol. ii. prop. 66, 67.

virtue,

virtue, and completely reconciles the most exalted benevolence to self-interest. This fact is a natural presumption in favour of that doctrine, and likewise of the truth of the christian revelation, which confirms this conclusion, and obviates the principal objections against it.

7. The perfect consistency and harmony of benevolence with self-interest is far from being self-evident, if the doctrine of a future life be denied. Cases may be supposed, and would probably occur, in which the interest of the individual would interfere with the general good. What obligation can a person in such circumstances be under to sacrifice his own happiness to that of others? What right can others have to demand this sacrifice?

8. Hence it follows that atheism, and infidelity, are inconsistent with a perfect theory of morals, and incapable of reconciling the opposing interests of benevolence and self-love.

9. No great sacrifices to the happiness of others are generally to be expected, nor have they frequently occurred, in men* who disbelieve

* *Nemo unquam sine magna spe immortalitatis se pro patria offerret ad mortem.*—Cicero. *Tusc. Quæst. lib. i.*

lieve a future life : and where they have occurred, they cannot be approved by wisdom, nor could they have been required by virtue.

SECTION IV.

Moral Obligation explained.—Different Kinds of Obligation.

OBLIGATION expresses the necessary connexion between means and ends, in voluntary acts.

Titus exhorts his soldiers to mount a breach, by the promise of immortality to those who fell. "Who does not know that the souls of those brave men who fall in battle are placed amongst the stars, and appear to their posterity as benevolent dæmons and heroes?" *δαίμονες δὲ ἀγαθοί, καὶ ἥρωες ευμενείς ἰδοὺς ἐκγονοὺς ἐμφανίζονται.*—Jof. Bell. Jud. lib. vi. c. i. sect. 5.

It must however be admitted, that men who have rejected the doctrine of a future life have sometimes made great sacrifices to the public good, from a sense of honour, enthusiastic patriotism, and the like; and wisdom will justify the sacrifice, when what they resign is of less value than the gratification of the feeling which prompts them to the act, however generated. But it is obvious, that the man who looks for recompense to a future life, will be prompted by this hope to make the greatest sacrifices to the good of others, in circumstances in which such sacrifices would be the extreme of folly in a person who has no such expectation.

For

For example : A man is obliged by law to pay his debts ; that is, if the end be to satisfy the law, the necessary means is the payment of his debts. So, a man is obliged in honour, to keep his word ; he is obliged from regard to health, to use necessary exercise ; if he would be rich, he is obliged to be industrious and frugal. In these cases and in all others, obligation expresses the inseparable connexion between means and ends.

OBLIGATION differs from COMPULSION ; the former respects voluntary, the latter involuntary acts, and is the effect of external force.

MORAL OBLIGATION EXPRESSES, THE NECESSARY CONNEXION BETWEEN THE PRACTICE OF VIRTUE, AND THE ATTAINMENT OF CERTAIN PROPOSED ENDS.

Moral agents are OBLIGED to the practice of virtue, in INTEREST, in REASON, and by the WILL OF GOD.

That is, if the end in view is to secure their most valuable interest, to act up to the dictates of reason, or to obey the will of God, the necessary means is, the practice of virtue.

These, though the principal, are not the only obligations to the practice of virtue.

Men

Men are obliged to be virtuous in many instances, by a regard to health, to reputation, to the law of the land, and the like.

Of the obligations from interest, reason, and the will of God, a question has been started concerning their respective ANTECEDENCY.

ANTECEDENCY may respect the order of time, the order of our conceptions, or the force of the obligation.

IN ORDER OF TIME, the three obligations are coincident with each other; they all commence with a capacity for moral agency.

IN the ORDER OF OUR CONCEPTIONS, the obligation of interest is antecedent to the other two; because it is the foundation of the obligation to act in conformity to right reason, and in obedience to the will of God.

With regard to the FORCE OF OBLIGATION, it is useless, not to say unbecoming, to inquire into the antecedency; for it is impossible that the will of God, or the dictates of right reason, should require any thing contrary to the greatest ultimate happiness of the agent, which alone constitutes the true value of intellectual existence.

SECTION V.

Concerning the Moral Sense.—Abstract Ideas of Right and Wrong, Fit and Unfit.

THE MORAL SENSE IS THAT FACULTY, AFFECTION, OR STATE OF MIND, WHICH EXCITES AN INSTANTANEOUS, DISINTERESTED APPROBATION AND LOVE OF WHAT IS CONSIDERED AS VIRTUE, AND DISAPPROBATION AND ABHORRENCE OF WHAT IS CONSIDERED AS VICE, WHEN PERCEIVED IN OURSELVES OR OTHERS.

The EXISTENCE of this principle we learn by experience and observation. It has been questioned whether it be instinctive or acquired.

The consciousness of it in ourselves; its early appearance in children, who constantly speak truth till they learn the contrary; the universality of its existence in all ages and countries, and the general uniformity of its dictates, are the principal arguments to prove that the moral sense is INSTINCTIVE.

But the diversity, and even contrariety of the dictates of the moral sense, in different ages and countries, is an insuperable objection against this hypothesis. Instinct is uniform

and universal : but the moral sense in one age and country approves, and in another reprobates, the exposing of children or old people, concubinage, incest, slavery, and the like.

The MORAL SENSE is an affection of mind, the origin and progress of which is similar to that of other mental affections, generated by the impression of external circumstances ; interested in its commencement, and gradually purifying itself in its course, till in its highest and most perfect state it becomes completely disinterested.

It is a very complex feeling, compounded of feelings which are themselves likewise very complex, and with difficulty analysed into their component principles.

Filial affection is one of the first ingredients in the moral sense. Frequent successive pleasurable impressions made upon the mind of the child by the kindness of the parent, coalesce into a pleasurable feeling, which associates itself with the visible appearance of the parent, with the idea, the name, &c. &c. This is the origin of filial affection ; it is, properly speaking, complacency.

Expressions of complacency produce increased expressions of kindness in the parent,

which in their turn generate renewed expressions of complacency; and the pleasurable feeling formed by the coalescence of the corresponding ideas constitutes filial benevolence, which is also associated with the visible appearance, the name, the idea, &c. as before.

Painful impressions are sometimes made upon the mind of a child by anger, reproof, correction, &c. of a parent; the coalescence of the corresponding ideas produces in a certain degree aversion, fear, and the like, which also associates itself with the visible appearance, name, idea, &c. of the parent.

The coalescence of complacency, benevolence, and fear, produces that complex feeling which is called filial affection.

To this affection and the expressions of it a child is taught to apply the term, **RIGHT**; to a contrary disposition and conduct he is taught to apply the term, **WRONG**.

In the same manner it would be easy to trace the origin of fraternal affection, the love of truth, and of justice, general benevolence, compassion, the fear and love of God, and the like. To each of these feelings, and to their correspondent expressions, the word **RIGHT** is constantly annexed; and to their contraries,

ries, viz. falsehood, malignity, injustice, ingratitude, impiety, and the like, generated in a similar manner, the expression **WRONG** is uniformly joined.

Hence the word **RIGHT** stands for that complex idea or feeling which is generated by the **COALESCENCE OF ALL THOSE AFFECTIONS**, and their correspondent expressions, to which the term **RIGHT** has been applied. In like manner, the word **WRONG** expresses the complex idea formed by the **COALESCENCE OF THOSE AFFECTIONS** which individually have been denominated **WRONG**.

From the first dawn of reason the child is taught by precept, example, and motive, by praise and blame, promise and threatening, reward and punishment, to do what is called **RIGHT**, and to abstain from what is called **WRONG**.

Hence to the word **RIGHT** is gradually annexed the idea of something that is to be encouraged and practised ; to the word **WRONG**, something that is to be discouraged and avoided.

The **PERCEPTION** of right and wrong is acquired by **INSTRUCTION** : the **TENDENCY** to practise the former, and to avoid the latter,

is generated by DISCIPLINE, that is, by placing a person in circumstances, and exposing him to impressions, which shall lead him to pursue the one, and to abstain from the other.

The MORAL SENSE includes both; namely, the perception of right and wrong, together with the tendency to practise one, and to avoid the other.

The MORAL SENSE originates in education, and is corrected, improved, and confirmed, as men advance in life, by observation and experience, by the discipline of the world, by reading and conversation, and by the exercise of the understanding upon moral subjects.

The terms RIGHT and WRONG are annexed to the same dispositions and actions in others, to which we annex them in ourselves. And with the same terms we combine the same ideas of approbation or disapprobation, of what is fit or unfit to be practised.

SECTION VI.

*Inferences from the above Analysis of the
Moral Sense.*

1. THE moral sense is not an instinctive principle. The law of association, by which simple ideas run into complex, and complex into decomplex ideas, is sufficient to account for this affection in all its varieties, and is indeed alone adequate to the solution of this phenomenon; for, as has been before observed, if the moral sense were instinctive, its perceptions and dictates would be as simple, invariable, and universal, as those of the external senses.

2. The perfection of the moral sense consists in the conformity of its dictates to *truth*, that is, when those actions and affections, and those only, are approved as right, which tend to the ultimate happiness of the agent; and vice versa. The character of a moral agent is perfect, when this perception of right is in every instance sufficient to govern the practice.

3. The moral sense may be, and often is, misled by education: the dictates of this feel-

ing, therefore, are not a perfect and infallible rule of right conduct.

4. Nevertheless, in persons tolerably well educated, the dictates of the moral sense are generally favourable to virtue; they ought therefore to be regarded as a good general rule of conduct, especially upon emergent occasions, where there is no time for deliberation.

5. To cultivate and enlighten the moral sense in ourselves and others, is a duty of the highest obligation, the most disastrous consequences having ensued both to individuals and to society from obedience to the dictates of a misguided conscience.

6. If the moral sense be, as we maintain, the result of education, early impressions, and external circumstances, the general similarity of its dictates in all ages and nations is easily accounted for, by the similarity of the constitution and circumstances of mankind, and the diversity of it in some instances, from a corresponding diversity of circumstances, and impressions.

7. It is easy to see what has induced some philosophers to represent the moral sense as an instinctive principle; namely, that besides the

general uniformity of its dictates, this affection commences at a very early age, before the memory begins to register impressions and events. And men of the best education and dispositions are most liable to this error: not recollecting any time in which they did not think and feel as they now do.

8. Hence likewise it is easy to account for the error of some philosophers, such as Dr. Clarke*, Dr. Price, and others, who represent the perception of right as constituting the obligation to practise it. By confirmed habits of virtue, the perception of right becomes a sufficient inducement to a right practice: and by inattention to the true theory of human nature, that is represented as a primary motive to the practice of virtue, which is only the result of established habit.

9. The analysis of the moral sense shows how improper it is, with Dr. Hutcheson and others, to represent the obligation to virtue as consisting in the impulse of this internal feeling. The pleasures and pains of the moral sense are undoubtedly powerful motives to practise what it decides to be virtue, and to

* See Sect. XII.

abstain from what it regards as vice. But motive and obligation are distinct ideas*. And the moral sense being a factitious principle, the dictates of which are sometimes erroneous, the impulse of its feelings cannot be universally obligatory with regard to practice.

SECTION VII.

Moral Value of an Action estimated.

REASON and CHOICE are essential to the MORAL VALUE of an action.

The DEGREE OF VIRTUE in a given action is universally estimated by the supposed EXCELLENCE OF THE MOTIVE.

The DEGREE OF VICE is estimated by the supposed meanness or MALIGNITY OF THE MOTIVE.

The consideration of philosophical liberty, or a power of choosing differently, the previous circumstances continuing the same, seldom or never enters into the estimation of the moral value of actions. But where hypothesis is not in question, the degree of virtue or vice in a given action, is estimated at the highest where there is the least room for the exercise

* Vide Sect. IV.

of free will, that is, where the virtuous or vicious affection is the most powerful and governs with the least controul.

The same external act may be either more or less virtuous, more or less vicious, or perfectly indifferent and destitute of all moral quality, in exact proportion to the moral value of the motive: for example,

CASE I. A person delivers his purse into the hands of another. It is required to determine the moral value of the action.

1. It was a child delivering up his toy; it was an idiot, or lunatic, parting with that, of the value of which it was incapable of judging.—Reason was wanting; the action has no moral quality.

2. It was yielded to superior force.—Volition is wanting, and consequently moral quality.

3. It was given voluntarily, but without inclination or design good or bad; it was the act of pure free will.

The supposition is impossible; but, if true, the action, wanting motive, would be destitute of moral quality.

4. It was delivered as a bribe for the commission of a crime.

The motive is detestable, and the action proportionably vicious.

5. It was the promised reward of a crime committed.

The motive is still base, and the action vicious, though perhaps not in so great a degree.

6. It was delivered to a highwayman under the impression of terror.

The motive is innocent; the action neither virtuous nor vicious.

7. It was the payment of a just debt.

The motive is virtuous; the action laudable.

8. It was given to charity, but from a motive of ostentation.

The motive is contemptible; such likewise is the action.

9. It was given from compassion, but without discretion.

The motive is moderately good, and the action proportionably such.

10. It was given by benevolence, under the direction of prudence.

The dignity of the action rises with the dignity of the motive.

11. It

11. It was the gift of benevolence, guided by discretion, and animated with piety.

This combination of the best motives, constitutes the action in the highest degree virtuous.

CASE II. A man takes away the life of another : the moral value of the action is required.

1. He was a lunatic ; reason was wanting, therefore moral quality.

2. It was accidental ; volition was wanting, consequently moral quality.

3. It was voluntary, without inclination or design good or ill.

The supposition is impossible ; but, if true, the want of motive would be the want of moral quality.

4. It was the effect of wanton cruelty, of deliberate malice, of desperate revenge.

The execrable malignity of the motive constitutes the action atrociously criminal.

5. It was the momentary and inconsiderate effect of violent passion upon sudden and great provocation.

The malignity of the motive is diminished, and the degree of moral evil in the action proportionably

proportionably abated, but not entirely annihilated.

6. It was the executioner carrying into effect the sentence of a *just* law.

If such a case is supposeable, the act is innocent.

7. It was in self-defence,

In this case, the act is both innocent and justifiable.

8. It was the act of a hero and a patriot, defending the liberties of his country against an unjust aggressor.

The motive is laudable, and the action greatly virtuous.

Could motives be analysed, and the proportionate value of each be accurately ascertained, there might be a propriety in the introduction of algebraic notation, and operations, for the solution of moral problems. But, the former being impracticable, the latter seems to be of little use*.

* Hutcheson's Inquiry, page 168—178.

Hartley on Man, part ii. prop. 171, Scholium.

SECTION VIII.

Moral Value of Character.

CHARACTER, IS THE SUM TOTAL OF MORAL HABITS AND AFFECTIONS.

That character is PERFECTLY VIRTUOUS, all whose affections and habits tend to produce the greatest ultimate happiness of the agent, and in which each virtuous habit and affection, is advanced to its highest, or most disinterested state: that is, to the state in which it has no other object than its own immediate gratification*.

That character is PERFECTLY VICIOUS, all whose affections and habits tend to produce the greatest ultimate misery of the agent, and in which every vicious affection exists in its most disinterested state.

The former character, though possible, is rarely to be found; but the tendency of moral discipline is to produce a continual approximation towards it; and it will probably be the ultimate moral state of all the rational creatures of God.

* Vide Sect. III.

The character of perfect vice is impossible; it can never actually exist. For no being can pursue misery for its own sake.

That agent is said to be virtuous, though IMPERFECTLY so, all whose habits and affections tend to his own ultimate felicity, but, not having attained their most perfect state, are subject to occasional deviations from the rule of right.

That agent is denominated vicious, but IMPERFECTLY so, in whom there is ONE moral habit which tends to produce misery, or to diminish happiness: for example, intemperance, avarice, dishonesty, impiety*.

The

* "He that is just, kind, meek, and humble, but at the same time a drunkard, or intemperate, has no pretence to true virtue. The same is true of him who is sober, temperate, and generous, but gives himself up to any kind of impurity; of him who reads, prays, and fasts, is exact in all the external parts of religion, and zealous for truth and piety, but wants candour, gentleness, meekness, veracity, and charity; of him who is chaste, inoffensive, friendly, faithful, and, it may be, useful and valuable in his station, but wants piety, &c. An habitual breach of *one* divine law, or retention of *one* favourite failure or bosom vice, demonstrates that, had the person equal temptation to transgress in all other instances, he would do it, and be totally
"abandoned."

The reason is obvious: the existence of a single habit of this description is inconsistent with the perfect happiness of the agent, and necessarily involves him in proportionable misery.

So the prevalence of a single disorder is inconsistent with perfect health, and, if a remedy be not applied in time, may be productive of the most fatal consequences.

“abandoned.”—Price’s Review of Morals, page 384, 385, first edition.

Upon the above extract it may be remarked, that the Doctor is right in the fact, but wrong in the argument. It is true that the prevalence of one vice constitutes a character vicious, but not because with equal temptation the agent would be chargeable with every other vice; for, if this doctrine were true, every man would be chargeable with every vice; as in given circumstances, every vice would be contracted by every man. And the only difference between the most virtuous and the most vicious person is, that the former was placed in circumstances, and exposed to impressions, which generated virtuous habits and affections, and the latter in circumstances by which vicious principles and dispositions were produced. Had the circumstances been different, the characters would have proportionably varied. And this, by the way, is an additional presumptive argument in favour of the ultimate happiness of all the moral creatures of God. The true reason why one vice only, is said to constitute a character vicious is, that the existence of one vicious affection is inconsistent with pure unmingled happiness.

The

The following seems to be at present the true moral state of the WORLD :

In every moral agent the number of virtuous actions greatly exceeds that of vicious ones. The most notorious liar speaks truth much oftener than falsehood ; and the most savage tyrant performs more acts of beneficence than cruelty.

In by far the greater number of moral agents, and even amongst those who are considered as most vicious and profligate, the number of virtuous affections and habits greatly preponderates over the vicious ones. A character in which there is a preponderance of vice, is very rarely, if ever, to be met with.

Nevertheless, as *one* vicious habit, in the usual, and even proper acceptation of the words, constitutes a vicious character, though balanced by many virtues, it is obvious that the number of vicious characters in the world, greatly exceeds that of the imperfectly virtuous.

Yet upon the whole the *sum* of virtue, probably in every character, and certainly in the world at large, greatly preponderates over the sum of vice.

COROLLARIES.

COROLLARIES.

1. It seems reasonable to conclude that virtue will ultimately triumph, in every individual, and in the world in general; in other words, that every individual will ultimately attain pure and perfect happiness, and that the world will be restored to a paradisiacal state.

This conclusion would be probable, even if the present preponderance were on the side of vice; for the tendency of all moral evil, and of its concomitant, natural evil, is to their own extermination, while that of moral and natural good is to produce and to extend themselves ad infinitum.

Much more evident does the inference in favour of universal happiness appear, now that the actually existing evil bears but a small proportion to the actually existing good. There is even reason to presume that the production of good will advance with accelerated rapidity: and experience evidently favours this conclusion.

Also, it seems more worthy of the wisdom and benevolence of the Supreme Being, gradually to refine his works from every impure mixture, and to carry them on to ultimate perfection, rather than to destroy them on ac-

count of a small proportion of evil, when they contain upon the whole a great preponderance of good.

2. Nevertheless, if there be a future life, the immediate condition of the great mass of mankind when they enter upon it, must be a state of very considerable pain and suffering.

For the great majority of human characters are alloyed with one or more vicious habits, and affections. These must be put under a process of cure, more or less severe in proportion to the malignity of the moral disease: but probably beyond conception more painful than any sufferings experienced in the present state; the discipline of this life having been found insufficient to complete the moral recovery.

3. This view of the moral state of the world remarkably coincides with the representations of the Scriptures, which uniformly declare, that the number of those who are saved, will bear but a small proportion to that of those who are to be condemned, that is, confined to suffering. But the revelation of a future state of suffering for the vicious, amounts, when duly considered, to a revelation of an *ultimate* state of happiness for all.

For

For it is very harsh to suppose that God will raise the vicious from a state of insensibility which has endured for ages, to annihilate them immediately. Still less can it be reconciled to wisdom and benevolence, that the wicked should be recalled to life, solely for the purpose of undergoing intense sufferings for an indefinite period, to be terminated by total destruction. As to the hypothesis of eternal torments, it is a doctrine for which few reflecting persons now contend. Since therefore the vicious are to be raised and exposed to suffering, it is highly reasonable to believe that these sufferings will be remedial, and will terminate with the vices which gave birth to them, so that in the end "death will be swallowed up in victory."

SECTION IX.

Analysis of the Ideas of Merit and Demerit, Approbation and Disapprobation, Praise and Blame, Reward and Punishment. Also of Fear, Shame, Remorse, and Repentance.

MERIT, is that quality in an action or affection, which attracts, or is associated with approbation, praise, or reward.

DEMERIT, is that quality which attracts disapprobation, blame, and punishment.

Hence it appears that virtue constitutes merit; and vice, demerit.

APPROBATION, is the name given to the pleasurable feelings of the moral sense. It arises upon the perception of virtue in ourselves or others: it is a very complex feeling, compounded of the vestiges of all the pleasurable sensations and ideas which have been associated with the affections or actions which are denominated virtuous. Vid. Sect. V.

DISAPPROBATION, expresses the pains of the moral sense. It is uneasiness excited by the perception of vice in ourselves and others.

PRAISE, is the expression of approbation: **BLAME**, is the expression of disapprobation.

REWARD, is natural good annexed to the practice of virtue, either by necessary consequence, or positive appointment, and the design of it is to encourage the practice of virtue both in the agent himself and in other beings similarly constituted.

PUNISHMENT, is natural evil annexed to the practice of vice by necessary consequence or positive appointment, the design of which

is to reclaim the sufferer, and to warn others against following his example.

It is obvious to remark, that neither merit nor demerit, approbation nor disapprobation, praise nor blame, reward nor punishment, suppose the existence of philosophical free will ; they are related to motives only. An agent is the proper object of these feelings only so far as he acts under the influence of motives ; and a being perfectly free, that is, independent on all motive, would be, ipso facto, incapable of all moral discipline, and no more the proper object of praise or blame, reward or punishment, than an infant or a lunatic*.

REPENTANCE, is a change in the state of mind from vice to virtue, by whatever means this change may be effected.

CONTRITION, is sorrow arising from the consciousness of defective virtue, of the pre-

* It is the more necessary to insist upon this point, because some necessarian philosophers of late, inattentive to the true consequences of their principles, have represented necessary agents as incapable of moral discipline : a concession which gives great and unjust advantage to the libertarians, as it is true only of those agents, if any such there be, who are philosophically free. See Godwin's Political Justice, book iv. ch. 8.

Priestley on Necessity, sect. 7.

valence of vicious affections, or of the performance of a vicious action.

SHAME, is a painful emotion arising from the imputation or consciousness of some affection or action, which will expose us to contempt.

FEAR, arises from the probable expectation of the punishment annexed to vice, here or hereafter.

REMORSE, is a painful emotion arising from the apprehension that under the existing circumstances it was in the power of the agent to have made a different choice.

COROLLARIES.

1. Repentance, Contrition, Shame, and Fear, are independent upon philosophical liberty, and are attributes of mind only so far as it is governed by motives.

2. Remorse supposes free will. It arises from forgetfulness of the precise state of mind when the action was performed. It is of little or no use in moral discipline. In a degree it is even pernicious. The vain supposition of a power of acting differently in the same circumstances induces men to venture into similar circumstances, fondly presuming upon

upon the exertion of their free will, when true wisdom and philosophy would dictate, flight from temptation as the only effectual means of safety*.

3. From all that has been said it appears that philosophical free will is not essential either to moral agency, or moral discipline, but incompatible with both ; so that a being partly free, and partly acting under the necessary influence of motives, is partly a moral agent and partly otherwise ; while a being perfectly free, and entirely independent of motives, would be utterly incapable of moral agency and moral discipline, and could not

* If it be asked, How is that remorse which a person feels while he is actually performing a vicious action to be reconciled to the doctrine of necessity ? It may be answered, that a man acting under the influence of an evil motive may be conscious of the badness of the motive, and may feel the sentiments of sorrow, shame, and fear ; which combined, sufficiently account for the horror sometimes experienced during the actual commission of a crime. But if to this be added the belief, that with the same violence of vicious affections, and in the same circumstances, he could have acted differently, the notion is founded in a mistake. If the conduct upon a similar occasion is different, it must be either because the circumstances are less favourable to the perpetration of the crime, or because the vicious habit is less imperious.

without the greatest folly and injustice be made accountable, that is, subject either to reward or punishment, for his actions or character*.

SECTION X.

Means of Virtue.

SUPPOSE an intelligent being to exist in a state of perfect neutrality between vice and virtue, convinced that happiness is the only valuable end of existence, and desirous of knowing the means by which the greatest sum of happiness is to be attained, the first question to be settled is, Whether there be a God; and, if there be, what is the character of the Supreme Being.

If there be a God, the maker of the world and its inhabitants, the happiness of his creatures must depend upon his pleasure; to please him therefore must be an object of the highest concern.

Consequently, it must be a concern of prime importance to intelligent creatures to form

* See this subject discussed more at large in The Philosophy of the Human Mind, chap. ix. sect. 6.

just ideas of the character of this great Being, that so they may know what course of conduct will be most acceptable to him, and most conducive to their own happiness.

The next point to be ascertained is, Whether the existence of man terminate at death, or whether there be any reason to expect a future state of being, which will take its character of happiness, or misery, from the moral conduct of men in the present life.

If the existence of man be limited to the present life, the only remaining question is, how must he act so as to attain the greatest sum of happiness for the momentary period allotted to him? for this, to him, will be wisdom and virtue.

It would not be difficult to prove that temperance, purity, justice, and benevolence would generally be productive of the greatest sum of happiness to the agent, even without the expectation of a future state of existence and reward*.

But it can never be proved that the interest of the agent himself might not in some instances be promoted by an occasional deviation

* Hume's Inquiry, Essays, vol. ii. sect. ix. part i.
Système de la Nat. part. i. c. 15. part. ii. c. 12.

from the strict rule of truth, justice, and benevolence. The contrary is in some cases highly probable*.

What obligation can any man who has no expectation of a future life be under, to sacrifice his own greatest temporal advantage and happiness to the interest of another?

But, if man be destined for a future life, many actions will be highly virtuous and wise, which upon the contrary supposition would be foolish in the extreme, and therefore vicious; for that may be very conducive to ultimate and permanent felicity, which may very considerably detract from present enjoyment: for example, sufferings and martyrdom in the cause of truth and virtue, or for the public good. Upon the same principle, if existence terminated in the present life, it would still be wisdom to sacrifice the gratification of an hour to secure health and permanent enjoyment†.

No perfect rule of virtue, therefore, can be formed, till the important question is settled,

* Hume's *Essays*, vol. ii. p. 334, 335.

† It is the doctrine of a future life only, which completely reconciles self-interest with benevolence. *Vid. Sect. III.*

whether or no the existence of man terminates with the present life†.

Admitting then the existence of an All-perfect Being, and the doctrine of a future life, the next inquiry is, What are those affections and habits, the encouragement and cultivation of which will conduce to the greatest ultimate happiness?

Now, the supposed neutral intelligent agent, in order to ascertain this fact, must,

1. Exercise his reason in comparing various habits, affections, and actions, such as truth, justice, benevolence, falsehood, malice, revenge, in order to discover their respective bearings and tendencies. Let him judge which of these dispositions are most promising, and most likely to produce happiness.

2. He must hazard experiment. Let him

† This is not the proper place to pursue the argument for a future life. It may however be proper to observe, that the phenomena of the moral world are highly favourable to this conclusion, and that the grand natural objection against it is completely surmounted by the christian doctrine of the resurrection of the dead, and the exemplification of the fact in the person of the founder of the christian faith. See *Philosophy of the Human Mind*, ch. xi.

make.

make trial of the affections which appear most conducive to felicity. This guide will be at first erroneous, because it will recommend immediate and temporary gratification, which will often be found inconsistent with ultimate good. It will however in time correct itself, but not till after many failures, and severe sufferings.

3. Observation of what passes in the world will assist in correcting experience. By seeing the consequences of experiments made by others, a wise observer will learn to imitate them when they succeed, and to avoid the errors, by which they suffer.

4. The testimony and advice of wise and experienced persons, concerning that mental discipline which they have found, or observed, to be conducive to the diminution of evil, and the increase of happiness, will be of the greatest use to correct and improve the judgment upon moral subjects.

5. Great advantage may be derived from the writings of moral philosophers, of those especially who discover the most accurate acquaintance with the structure of the human mind, and who form the most just and comprehensive

prehensive views of virtue and moral obligation*.

6. Just views of the character and government of God will naturally prompt to that course of conduct which is most acceptable to him, and most conducive to happiness. If benevolence be regarded as the great principle of the divine government, it cannot be doubted that the true way to please God, and to secure ultimate felicity, is by wise, active, and persevering exertions in doing good.

7. If the will of God concerning the rule of life has been revealed to mankind, this revelation, thoroughly understood, must be an infallible guide to ultimate happiness†.

8. The

* Hartley's Observations on the Rule of Life, (part ii. c. 3.) with a few exceptions, which will readily occur to a judicious reader, contain an admirable outline of practical morality, founded upon the true philosophy of the human mind, which few persons can read with proper attention, without being made both wiser and better.

† The extreme improbability that a Jew, in the unfavourable circumstances in which Jesus was educated, should, by the native energy of his mind, have emancipated himself from the narrow prejudices of his countrymen, and have formed a wise and benevolent system of morals, so complete

8. The affections which are essential to virtue and happiness, being generated by the frequent repetition of those actions in which they originate, by the law of association gradually coalesce into that complex state of mind called the Moral Sense (Sect. V.); which, continually improving by reflection and exercise, will upon every emergent occasion prompt to the practice of virtue, will form its judgments with precision, and will gradually acquire that uniform ascendancy over

plete and enlarged as to be incapable of being improved by the most enlightened philosophy of ancient and modern times, and the authority with which he delivered his precepts, prove that Jesus taught with a consciousness of a divine commission. And it is allowed almost universally, even by unbelievers themselves, that the precepts of the christian religion are agreeable to enlightened reason, and form a just rule of life. But the voice of reason is the voice of God.

“ The morality that Jesus preached and practised “ (says a celebrated champion of infidelity) was of the “ most benevolent kind; and though similar systems of “ morality had been preached by Confucius, and by some “ of the Greek philosophers, many years before, by the “ Quakers since, and by many good men in all ages, it “ *has never been exceeded by any.*” Age of Reason, p. 9, 10.

the

the conduct, which constitutes the perfection of a virtuous character, and the truest felicity of a moral agent.

SECTION XI.

Observations on the preceding Rules.

1. THE preceding rules have been laid down, upon the supposition that an intelligent being, capable of virtue, had reached maturity in a state of perfect moral neutrality, and before the moral sense was in any degree formed. But the fact is universally otherwise. Moral sentiments are naturally, and necessarily, generated in the mind by education, and the impression of external circumstances. These sentiments are often erroneous. The duty therefore of a moral agent, when he has attained to years of discretion, is to review and examine closely the dictates of the moral sense, to bring them to the test of the abovementioned principles, and standards of judgment, to supply what is wanting, to correct what is erroneous, to confirm and improve what appears to be right,

right, and thus to advance gradually to the perfection of moral character.

2. As it is impossible that the mind should grow up in a state of absolute moral neutrality; as such a state would be very undesirable, even if it were possible; as vicious principles and affections will certainly introduce themselves, if wise and virtuous ones do not pre-occupy the mind; and as the affections and habits cannot be fixed too early on the side of virtue; it is a duty of the first importance in parents and instructors of youth to instill those principles, and to exercise that discipline, which will give a right direction to the moral sense, which will lead young persons to form a true judgment concerning right and wrong, and which will generate benevolent affections, and habits of virtue. And it is a dangerous mistake of some, to neglect the moral instruction of children and young persons, lest they should inadvertently instill error and prejudice. The preponderance of principles and habits in a moral education will undoubtedly be on the side of truth and virtue; and it is much easier in after life to rectify the defects of an erroneous, than of a neglected and immoral education.

3. Amongst

3. Amongst the means of improving the Moral Sense, the Law of Honour, and the Law of the Land, have sometimes been reckoned; but these can by no means be admitted as correct standards of virtue.

The LAW OF HONOUR, is defined by Dr. Paley, to be "a system of rules constructed by people of fashion to facilitate their intercourse with each other."

This is a powerful principle of action in certain classes of society; but it is no proper rule of life, unless it can be proved that people of fashion are the best judges concerning the ultimate tendency of human actions. But it is too apparent that the law of honour, though often coincident with that of virtue, sometimes prohibits what virtue requires; and more frequently permits, and even requires, what virtue expressly forbids. The most remarkable instance of which is the case of duelling, which the law of honour sometimes imperiously enjoins, though evidently contrary to common sense, to the law of the land, to the rules of virtue, and to the will of God*.

* Paley's Moral Philosophy, book i. ch. ii.

The LAW OF THE LAND, is a very imperfect standard of virtue. Laws indeed are not often inconsistent with morals; and obedience to them is a duty of unquestionable obligation, when not superseded by duties of superior importance. But the wisest laws can only controul external actions, while virtue chiefly respects habit, affection, and motive. And if the law of the land requires, what the law of virtue prohibits, disobedience is not only innocent, but indispensable*.

SECTION XII.

Examination of the Theories of Dr. Clarke, Dr. Hutcheson, Dr. Reid, and Dr. Price.

HAVING stated and established what appears to be the most probable theory of morals, we now proceed to exhibit the different accounts of virtue and moral obligation, which have been given by some of the most celebrated writers on the subject.

I. Dr. Clarke maintains, " that the eternal
" necessary differences in things, obvious to
" all whose understandings are not depraved,
" lay a foundation for different relations, and

* Acts iv. xix. v. 29.—Paley, book i. ch. iii.

"for the fitness or unfitness of certain actions
 "to these relations." The congruity of the action to the circumstances or relations in which the agent is placed, is Virtue ; its incongruity is Vice.

"These eternal necessary differences lay an
 "obligation upon men to act virtuously, separate from any consideration of the will of
 "God, or any expectation of advantage or
 "disadvantage annexed, by natural consequence, or positive appointment*."

Against this theory of virtue and moral obligation, it may be objected :

1. That if the fitness or unfitness of actions means any thing different from their tendency to happiness or misery, the expression is unintelligible.

2. That it is a mere *petitio principii* to assert, that the perception of fitness constitutes an obligation paramount to all other considerations, or even any obligation at all to the practice of those actions which are denominated fit.

3. It makes virtue and vice perfectly arbitrary, as depending upon the imagined perception of an imaginary congruity, or incon-

* Clarke at Boyle's Lectures, fol. vol. ii. page 79—88.

gruity. It is in vain to say that these fitnesses are self-evident: for in that case they would be undisputed; which is contrary to fact.

4. It is a very gloomy system of morals. For, virtue consisting in fitness, and the obligation to virtue being paramount to that of interest, and sometimes even inconsistent with it, a moral agent may, by the practice of virtue, diminish his own happiness and that of others; and the Supreme Being himself may have an end in view distinct from, and inconsistent with, the happiness of his creatures*.

BISHOP BUTLER assumes the principle that men possess a power of reflection upon actions and characters: that we naturally and unavoidably approve some as virtuous, and condemn others as vicious. This faculty is moral reason, moral sense, &c. The objects of this faculty are actions and principles, as truth and falsehood are of reason; and that it is accompanied with a real though inexplicable sense of good or ill desert†.

* Balguy's Inquiry into the Nature of Moral Goodness.
Doddridge's Lectures, lect. 52, 53.

Cooper's Essays, essay i. page 20—29.

† Butler's Anal. 2d sin. Diff. ii.

OBJ. 1. Butler mistakes an acquired for a natural principle.

2. He gives up as inexplicable the sense of good and ill desert, which upon the theory of association is easily explained, and its varieties satisfactorily accounted for; which, if instinctive, is impossible.

II. DR. HUTCHESON defines moral goodness to be "a property apprehended in some actions which produces approbation and love toward the actor, from those who receive no benefit from the action," and supposes a Moral Sense implanted in our natures, which, independent of any argument, leads us to perform virtuous actions ourselves, or to approve them when performed by others*.

The whole of this theory being founded upon the supposition that the Moral Sense is an instinctive principle, is refuted by every argument and fact, which proves that affection to be the result of education and habit. Vide eccl. V. VI.

DR. REID warmly patronizes the doc-

* Hutcheson's Inquiry into Beauty and Virtue, page 101—149.

trine of instinctive principles. "Moral obligation," he says, "is a relation which every one understands, but is too simple to admit of logical definition." This observation is not correct if the analysis of Moral Obligation, Sect. IV. is allowed to be just*.

III. DR. PRICE maintains, that "Right and Wrong are simple ideas acquired by the understanding," which, according to him, is a distinct source of perceptions. That Virtue is right and ought to be practised, is self-evident; also, that Vice is wrong and ought to be avoided. The perception of this truth constitutes moral Obligation, without any prospect of advantage, or reference to any other consideration. "The question why we ought to do what is right," says he, "is identical and absurd†."

OBJ. I. This account of virtue and moral obligation is obscure and unintelligible; it does

* Reid on the Active Powers, Essay iii. ch. v. vi.

Cooper's Essays, page 29—45.

Beattie on Truth, part i. ch. ii. sect. iii.

Priestley's Answer to Beattie, sect. iv.

† Q. What is Right according to this hypothesis?

A. A simple idea that cannot be defined.

Q. What

does not indeed profess to explain any thing, but refers to a kind of infallible judge within, the dictates of which appear in fact to be very different in different persons.

2. The ideas of right and wrong are not simple, but very complex notions, formed, like all other complex ideas, by association, and by the coalescence of the component simple ideas. Vide Sect. V.

3. The practice of what we believe to be right, will automatically follow the perception of right, where they have long been associated

Q. What is Wrong?

A. The same.

Q. What is Virtue?

A. Doing right.

Q. What is Vice?

A. Doing wrong.

Q. What is the Obligation to practise virtue?

A. Perceiving it to be right.

Q. What is the Obligation to abstain from vice?

A. Perceiving it to be wrong.

Q. But why ought I to do what is right, and to abstain from what is wrong?

A. The question is identical and absurd.

All this is, no doubt, very instructive and convincing.

Price's Review of Differences in Morals, ch. i.—vi.
Priestley's Answer to Reid, Oswald, and Beattie, Appendix, no. i.

together, by the invariable law of human nature: but this is a very different thing from moral obligation, as explained Sect. IV, and by no means proves either that our idea of right is just, or that we are in any given instance obliged either in reason, interest, or duty, to follow the impulse of the moral perception. If I believe persecution to be right, my idea in this instance is incorrect; and however *prone* I may be to act upon it, I can be under no rational or moral obligation to persecute*.

SECTION XIII.

Theories of Wollaston—of some of the Ancients—of Cumberland, Rutherford, Browne, and Adam Smith.

IV. WOLLASTON places virtue in regard to truth. He supposes that all voluntary actions have a language; that when this language is agreeable to truth the action is virtuous; that when it implies a falsehood

* Cooper's Tracts, page 60—64.

the action is vicious. This distinction of action implies obligation to the practice of virtue. Happiness follows an habitual regard to truth, but is not represented by this author, as the primary obligation to virtue*.

Upon this fanciful definition of virtue it is sufficient to remark, that if the language of a given action is supposed to be, "This action tends to the ultimate happiness of the agent;" if the assertion be true, it is virtuous; if false, the action is vicious; and this definition might be admitted as just, though vaguely and obscurely expressed†.

V. MANY WRITERS, ancient and modern, place virtue in the "imitation of God."

But this definition will not apply to the moral rectitude of the Supreme Being; it is therefore defective.

The same objection lies against that definition of virtue which places it in "obedience to the will of God."

It may be asked *why* the Deity requires obedience? The answer to this question

* Religion of Nature, page 1—46.

† Cooper's Essays, page 76—73.

proves the existence of some reason for this duty distinct from the will of the Deity: namely, that which determined his will.

It may also be asked, Why am I obliged to obey the will of God? The answer to this question proves the existence of a distinct source of obligation*.

The hypothesis that virtue consists in "me-diocrity," is too vague and indefinite to merit any attention†.

VI. BISHOP CUMBERLAND places virtue in benevolence, and its obligation in self-interest. The foundation of all natural law is this: "The greatest benevolence of every rational agent towards all, forms the happiest state of every, and of all the benevolent, so far as it is in their power, and is necessarily requisite to the happiest state they can attain, and therefore the common good is the supreme law‡."

It is plain that Cumberland's definition

* Cooper's Essays, page 11—19.

Doddridge's Lectures, page 122.

† Aristotle's Eth. lib. ii. ch. vi.

Grot. de Jure B. et P. proleg. sect. 43—45.

Rel. of Nat. page 24, 25.

‡ Cumberland's Law of Nature, ch. i. sect. iv.

coincides with that which has been stated in these papers as the true theory of morals.

VII. RUTHERFORTH places virtue in a "wise regard to our own interest*."

Virtue is the tendency of the action or affection to the ultimate happiness of the agent. But it is not necessary that there should be an explicit *regard* to this end in every action; on the contrary, even this rational self-interest is inconsistent with perfect virtue. Vide Sect. III. note.

VIII. BROWNE represents virtue as consisting in "the conformity of our affections to "the public good," or "the voluntary production of the greatest happiness;" and places the obligation to virtue in feeling immediate, or in the prospect of future happiness†.

This account of virtue coincides with that of Dr. Cumberland, No. vi.

IX. DR. ADAM SMITH places the virtue or vice of an action in the suitableness or unsuitableness, the proportion or disproportion, which the affection from which it proceeds

* Essay on Virtue, page 153—157. 195—209.

† Browne on the Characteristics, no. ii. sect. iii.—vi.
bears

430 HUME'S ACCOUNT OF VIRTUE.

Reason may instruct us concerning the tendencies of actions, but it is not alone sufficient to produce moral blame or approbation: this is the province of *humanity**.

REMARKS.

1. HUME'S definition of virtue as an useful or agreeable quality, is too indefinite.

2. What he calls the interested obligation to virtue, is the *primary* obligation, and lies at the foundation of every other moral obligation.

3. Mr. Hume's *natural benevolence* or *humanity*, which produces moral blame or approbation, is but another word for moral sense, sympathy, &c.; and he falls into the common error of supposing it to be an instinctive affection†.

XI. Many modern writers place virtue in UTILITY, OR EXPEDIENCE.

The principal objection against this account of virtue, is the ambiguity of the expression, and its liability to perversion and misconstruction.

* Hume's Essays, vol. ii. essay ix. Appendix, i.

† Cooper's Tracts, numb. i. page 73—86.

UTILITY is a tendency to advantage : and it is either *individual* or *social*.

1. INDIVIDUAL UTILITY is a tendency either to the greatest ultimate advantage of the agent, or to an inferior and subordinate good.

If utility means the greatest ultimate advantage of the agent, the definition is just : ultimate utility is the essence of virtue.

If utility expresses the tendency of an affection or an action to an inferior and subordinate good, for example, to life, health, sensual or intellectual gratification, wealth, reputation, popularity, dignity, authority, power, and the like, then utility is not synonymous with virtue : for a tendency to these ends is not the quality which renders an action or affection eligible, the attainment of them being in many instances inconsistent with the greatest ultimate good, to which therefore they ought ever to be sacrificed.

2. SOCIAL UTILITY signifies either the tendency of an affection or action to produce the greatest sum of universal happiness, or the happiness of a certain class and number of individuals ; that is, it is either universal or partial.

The

The tendency of an affection or action to the GENERAL GOOD, coincides with its tendency to the true ultimate happiness of the agent, and is therefore an admissible definition of virtue.

But if PARTIAL UTILITY be intended, when utility is represented as the essence of virtue; if by this expression be meant the tendency of an affection or action to the advantage of a particular family, or society, or party, or corporation, or trading company, or religious community, or established government, or province, or nation, or district of the globe, or the like; this is no safe nor accurate criterion of virtue: for the interest of any such subordinate societies may be inconsistent with the general good.

COROLLARY.

Hence it follows that there can be but ONE RULE OF RIGHT, namely, the tendency of an action or affection to the ultimate happiness of the agent, or what completely coincides with this, under the government of perfect wisdom and benevolence, to the greatest general good: and all distinctions between what is commercially, legally, politically, &c.

right, and what is morally or theologically right, are groundless, absurd, and in practice highly pernicious*.

SECTION XV.

Account of Virtue by Hartley, Paley, Cooper, Gifborne, and Godwin.

XII. ACCORDING to Dr. HARTLEY, the rule of life is "compliance with the will of God." This is the immediate dictate of rational self-interest.

"The will of an infinitely benevolent Being must be the love of God and our neighbour, with moderation in all selfish enjoyments."

Virtue in creatures is founded in the love of God; which Hartley defines to be "a pleasing affection towards a Being infinite in knowledge, power, and goodness; who is also our friend and father." This affection regulates and improves all the inferior parts of our nature, and particularly the pleasures of sensation, imagination, ambition, and self-interest; it is the only true source of benevolence, and the

* Bentham's Introduction to Principles of Morals and Legislation.

W. Bentham's Essays, vol. i. essay vii.

best direction and support of the moral sense. It affords a pleasure superior in kind and degree to all the rest, and is therefore our primary pursuit and ultimate end*.

XIII. Dr. PALEY defines virtue, "doing good to mankind, in obedience to the will of God, and for the sake of everlasting happiness."

"The good of mankind is the subject, the will of God is the rule, and everlasting happiness the motive, of human virtue."

"To be obliged, is to be urged by a violent motive, resulting from the command of another."

"The will of God is to be discovered either by his express declarations, or by the tendency of the action to promote or diminish the general happiness†."

I. Concerning this definition of virtue, it may be remarked :

1. That it does not profess to be a definition of moral rectitude in general, but of human virtue alone.

* Hartley, part ii. ch. iii. Introduction, sect. vii.

† Paley's Moral and Political Philosophy, book i. ch. vii. book ii. ch. i.—v.

2. That,

2. That, even as a definition of human virtue, it is incorrect and inadequate.

For it excludes out of the catalogue of virtues the moral qualities of all who disbelieve the existence of God, or the doctrine of a future life ; yet it cannot be denied that such persons may be just, temperate, humane, generous, and amiable*.

But this definition also excludes from the class of virtues, the most excellent moral habits when they have attained their disinterested, that is, their highest state. For, according to this account, no action is virtuous which is not prompted by rational self-interest. But though rational, and even gross self-interest may be the necessary motives to virtuous actions, previous to the generation of virtuous habits ; yet, when these affections are thus formed and advanced to maturity, they do of themselves furnish a sufficient sti-

* The existence of God, and the doctrine of a future life, are of the highest importance in a system of morals. But Dr. Paley is a philosopher of too liberal a mind, and too accurate in the use of language, to deny the name of virtues to temperance, justice, truth, and goodness, though the men in whom they are found should be unbelievers in what he justly deems fundamental truths.

mulus to virtuous actions, without any explicit regard even to the most refined and rational self-interest. And the expectation of future reward is so far from being essential to the existence of human virtue, that an explicit regard to it as a motive, is even inconsistent with a state of complete, that is, of absolutely disinterested virtue. Self-annihilation, as was before observed, being essential to perfect virtue and perfect happiness. Sect. III. note.

• II. Concerning Dr. Paley's account of obligation it may be remarked :

1. That a *violent motive* is a phrase scarcely intelligible. Motive addresses itself to the will. Violence constantly expresses compulsion, or external force. A "violent motive" is therefore an inconsistent idea.

2. Obligation by no means uniformly implies an obliger, as Dr. Paley affirms : authority is *one*, but not the *only* source of obligation. Reason, interest, convenience, honour, conscience, and the like, are all occasionally sources of obligation. Thus, a child may be obliged by* the authority of a parent

* Obligation by authority sometimes signifies compulsion,

parent to do that, to which he is also obliged in honour and interest. Vide Sect. IV.

XIV. Mr. COOPER puts the question, "Why do you act thus?" His answer is, "Because it is conducive to my happiness on the whole." That this is the true answer, he says, appears from considering,

"That it is founded on fact. No further inquiry can be made."

"That no motive can be the ultimate motive which admits of inconsistency with our happiness."

"That we do above all things seek and desire our happiness."

"That the ultimate end of the whole creation, as far as we can judge, is the production of happiness."

"That Revelation itself assigns this as the ultimate reason of its requisitions."

"That self-love is the foundation of all the other affections, even the social and the pathetic."

"That it is confirmed by the common sense of all mankind," and

pulsion, as in this instance of a parent and a child; but obligation when it becomes compulsory ceases to be moral.

438 GISBORNE'S ACCOUNT OF VIRTUE.

“ That all voluntary actions are the immediate consequences of inclinations and aversions*.”

XV. Mr. GISBORNE states, that “ the primary end of the being of every man is to promote and secure his own final happiness.”

“ That this object can be attained by no other method than by obedience to the will of his Maker.”

That “ promoting the final welfare of his fellow-creatures, and their present happiness, is a subordinate purpose, conducive to the principal end of existence.”

Also, that every man has certain natural rights ; and that “ he sins against God, who either deprives another of his rights unjustly, or who does not act in such a manner with respect to the use, defence, and disposal of his rights, as he is of opinion will, upon the whole, fulfil most effectually the purposes of his being†.”

These

* Cooper's Tracts, numb. i. page 86, &c.

† Mr. Gisborne objects to Dr. Paley's definition of virtue, as consisting in *expedience*, that man has not faculties capable of discovering what is generally expedient. But it does not appear to have occurred to this respectable

These principles plainly coincide with the account of virtue, which represents it as that course of conduct which tends to the greatest ultimate happiness of the agent.

It is so expressed as only to define human virtue. With a little alteration it would be applicable to the rectitude of all moral and intelligent beings.

XVI. Mr. GODWIN assumes JUSTICE as, a "general appellation for all moral duty*."

He defines justice to be "that impartial treatment of every man in matters that relate to his happiness, which is measured solely by a consideration of the properties of respectable writer that his own definition is liable to a similar objection. It is as difficult for a man to judge, in all cases, what use of his rights will most effectually fulfil the purposes of his being, as what conduct will be most conducive to general happiness. The truth is, that in all common cases it is easy to ascertain what will be most conducive both to our own happiness and that of others; but that in some extraordinary emergencies it is difficult to form a right decision. This difficulty, however, presses equally upon the two hypotheses; and consequently cannot be urged by the advocates of one as an objection against the other.—Gisborne's Principles of Moral Philosophy, ch. i.—iv.

Godwin's Enquiry concerning Polit. Just. page 86—103.

* Godwin's Political Justice, book ii. ch. ii. page 126.

"the receiver, and the capacity of him that bestows*."

Enquiring into the degree in which we are obliged to consult the good of others, he decides, that "it is just I should do all the good in my power†."

And, "if the extraordinary case should occur in which I can promote the general good by my death, more than by my life, justice requires that I should be content to die‡."

He defines virtue "to be any action or actions of an intelligent being, proceeding from kind and benevolent intention, and having a tendency to contribute to general happiness§."

He represents it as the fundamental principle of morality, "that each man is bound to consider himself as a debtor in all his faculties, his opportunities, and his industry, to the general welfare. This is a debt which must be always paying, never discharged||."

* Godwin's Political Justice, book ii. ch. ii. page 127.

† Ibid. page 134.

‡ Ibid. page 135.

§ Ibid. ch. iv. page 150.

|| Ibid. book iv. ch. vi. page 352.

He maintains that "morality is nothing
"else but a calculation of consequences, and
"an adoption of that mode of conduct which,
"upon the most comprehensive view, appears
"to be attended with a balance of general
"pleasure and happiness*."

The motive to virtue is disinterested benevolence, which indeed he admits to be generated by self-love, in the same way as avarice or any other passion or habit. "The good
"of our neighbour, like the possession of
"money, is originally pursued for the sake
"of its advantage to ourselves†."

Disinterested benevolence is however "confirmed by reflection in a sense in which it
"never can confirm" the meaner passions‡.

Mr. Godwin declaims against the hypothesis of self-love. He nevertheless allows that the pleasures and pains of benevolence, "though not the authors of the determination, undoubtedly tend to perpetuate and
"to strengthen it§."

* Godwin's Political Justice, book iv. ch. vi. page 344.

† Ibid. ch. x. page 426.

‡ Ibid. page 428.

§ Ibid. page 430.

He remarks that "the man of benevolence ascends to the highest of human pleasures, the pleasures of disinterestedness. No man so truly promotes his own interest as he that forgets it. No man reaps so copious a harvest of pleasure as he who thinks only on the pleasures of other men*."

He adds, "that virtue is upon no other account valuable, than as it is the instrument of the most exquisite pleasure†."

From this view of Mr. Godwin's theory of virtue it appears,

1. That this theory directly coincides with that of those philosophers who place virtue in utility, or in the voluntary production of the greatest good, and ultimately with that which places the virtue of an action in its tendency to produce the greatest ultimate happiness of the agent. Justice usually signifies abstaining from injury; but in the sense in which it is used by Mr. Godwin, who assumes it as a general appellation for all moral duty, it expresses benevolence under the direction of wisdom.

* Godwin's Political Justice, book iv. ch. x. page 447.

† Ibid. page 449.

2. Mr. Godwin adopts Dr. Hartley's theory of deriving the disinterested from the selfish affections: and he justly contends, that when affections have reached their disinterested state, they will prompt to action without any regard to selfish considerations. He expressly says, that "it is incontrovertibly evident that the direct motive to many of our actions is purely disinterested. We are capable of self-oblivion as well as of sacrifice*."

All this follows by necessary consequence from the doctrine of association.

3. The hypothesis of self-love, to which Mr. Godwin so strongly objects, page 429, is that explicit regard to self-interest which Dr. Hartley has demonstrated, and which indeed every man's own consciousness may prove to himself, to be inconsistent with true happiness; and this not only in the case of gross self-interest, such as the pursuit of gain, but even of refined self-interest, such as the practice of virtue from a respect to present or future reward. Though such considerations may be and in fact are the necessary

* Godwin's Political Justice, book iv. ch. x. page 432.

means of generating virtuous and benevolent affections, yet virtue and happiness can never be complete till these affections have advanced to a disinterested state, and all consideration of self is completely excluded. This Mr. Godwin calls self-oblivion, and Dr. Hartley self-annihilation.

4. Mr. Godwin has no where distinctly explained the obligation which moral agents are under to the practice of virtue, which is a material defect in his theory of morals. He has affirmed, but he has not satisfactorily proved, that a man *ought* to sacrifice his interest and even his existence to the general good. Justice may indeed require that in such circumstances "I should be content to die." But the question still recurs, Why am I obliged to do what justice requires? Mr. Godwin will hardly be contented with the short answer which some have given, viz. that "the question is identical and absurd." He has indeed himself suggested the proper reply to it. The pleasures of disinterestedness are represented by him as "the highest of human pleasures. No man so truly promotes his own interest as he that forgets it." And again, "He who sits loose to life and all its pleasures,

"pleasures, and is ready without a sigh to sacrifice them to the public good, has an uncommonly exquisite source of happiness*."

This consideration might have led Mr. Godwin to the true notion of moral obligation, as consisting solely in the tendency of a virtuous action to the ultimate happiness of the agent. But he seems unwilling to admit the pleasure arising from disinterested benevolence as the foundation of obligation, and only represents it as "tending to perpetuate and strengthen" the benevolent principle. But when he asserts that "morality is no thing else but a calculation of consequences," and that "virtue is upon no other account valuable, than as it is the instrument of the most exquisite pleasure," he seems to concede that rational self-interest is the basis of moral obligation†.

Upon the whole, Mr. Godwin's account of virtue labours under the essential defect of omitting a clear and distinct analysis of moral obligation; and if he has proved that justice

* Godwin's Political Justice, book iv. ch. x. page 431.

† Ibid. 449.

requires

requires the sacrifice of individual interest, to general good, he has not made out in a satisfactory manner the reason why the individual in extreme cases is bound to obey the requisition of justice.

5. The true state of the question therefore appears to be this: not whether men whose minds have been exercised with a certain discipline, will in given circumstances readily sacrifice their interest and even their existence to the public good, for this is an undoubted fact: nor yet whether such conduct would meet with general applause, for that likewise must be admitted; but whether such conduct is obligatory upon the individual, and whether such applause is judicious and well-founded. Men's actual conduct, and general approbation are very inaccurate criteria of real merit. If the individual is told that he is under indispensable obligation to sacrifice his own greatest ultimate good to the happiness of others, he has a right to enquire, and it behoves him with the utmost solicitude to examine, upon what ground he is obliged to make so precious a sacrifice: and it will be found much easier to make the assertion, than to establish the obligation.

If A is to decide upon the destiny of B and C, he may with propriety, from regard to the general good, sacrifice the interest of B to that of C. But this can never prove to B that it is his duty to sacrifice his own greatest ultimate good to the interest of C. To the "valet of Fenelon" his own felicity must be more dear than that of Fenelon himself: and why *ought* he to part with his all, that Fenelon and a few others may each receive an addition, whether less or more, to their respective sums of happiness? No sacrifices therefore to the general good are, or can be obligatory, where there is not a prospect of adequate compensation. But this in extreme cases is possible only upon the hypothesis of a future life, and under the government of a Being of consummate wisdom and benevolence. In which case, to suppose that any being can be ultimately a loser by the greatest sacrifices he can make of self-interest to the good of others would be extravagant and absurd. And this brings us to the important conclusion, that SELF-LOVE AND BENEVOLENCE CAN ONLY BE RECONCILED BY RELIGION.

THE END.

Lately published, by the same Author,

I. FREEDOM OF ENQUIRY,

**And ZEAL in the DIFFUSION of CHRISTIAN TRUTH
ASSERTED, AND RECOMMENDED.**

In a Discourse delivered at Bristol, July 9, 1800, before the
Society of Unitarian Christians, established in the West of
England, for promoting Christian Knowledge, and the
Practice of Virtue, by the Distribution of Books. Price 1s.

II. DISHONEST SHAME THE PRIMARY SOURCE

OF THE

CORRUPTIONS OF THE CHRISTIAN DOCTRINE.

A Sermon, preached at Hackney. Price 6d.

III. KNOWLEDGE THE FOUNDATION OF VIRTUE.

A Sermon addressed to the young Persons who attend at
the Gravel-Pit Meeting at Hackney. Price 6d.

**IV. A SERIOUS CAUTION AGAINST POPULAR
ERRORS. A Sermon. Price 1s.**

V. A REVIEW of Mr. WILBERFORCE'S TREATISE

ENTITLED

*"A Practical View of the prevailing religious System of professed
Christians, &c."*

In LETTERS to a LADY. Price 4s. in Boards.

